

FILE 'BIOSIS, CABA, CAPLUS, EMBASE, LIFESCI, MEDLINE, SCISEARCH,
USPATFULL, JAPIO' ENTERED AT 14:52:23 ON 03 DEC 2002

L1	30972 S BORDETELLA
L2	495349 S TOXIN
L3	0 S PT INIBITOR?
L4	55819 S PERTUSSIS TOXIN
L5	1460531 S INHIBITORS
L6	6840 S L4 AND L5
L7	30972 S L1
L8	250 S L1 AND L6
L9	178 DUP REM L8 (72 DUPLICATES REMOVED)
L10	64 S TOXIN PRECURSORS
L11	0 S L9 AND L10
L12	35 S CYSTEINE AND L9
L13	35 DUP REM L12 (0 DUPLICATES REMOVED)

13 ANSWER 1 OF 35 USPATFULL

AB Methods and compositions are provided for the enhanced production of bacterial toxins in large-scale cultures. Specifically, methods and compositions for reducing bacterial toxin expression **inhibitors** are providing including, but not limited to, addition of toxin expression inhibitor binding compounds, culture media having reduced concentrations of toxin inhibitor metabolic precursors and genetically modified toxogenic bacteria lacking enzymes required to metabolize the toxin inhibitor metabolic precursors.

AN 2002:295294 USPATFULL

TI Method for the production of bacterial toxins

IN Blake, Milan S., Fulton, MD, UNITED STATES

Bogdan, John A., JR., Westminster, MD, UNITED STATES

Nazario-Larrieu, Javier, Rio Piedras, PR, UNITED STATES

PI US 2002165344 A1 20021107

AI US 2001-825769 A1 20010404 (9)

PRAI US 2000-194478P 20000404 (60)

DT Utility

FS APPLICATION

LREP Baxter Healthcare Corporation, P.O. Box 15210, Irvine, CA, 92614

CLMN Number of Claims: 8

ECL Exemplary Claim: 1

DRWN 13 Drawing Page(s)

LN.CNT 956

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d ab bib 113 1-35

L13 ANSWER 1 OF 35 USPATFULL

AB Methods and compositions are provided for the enhanced production of bacterial toxins in large-scale cultures. Specifically, methods and compositions for reducing bacterial toxin expression **inhibitors** are providing including, but not limited to, addition of toxin expression inhibitor binding compounds, culture media having reduced concentrations of toxin inhibitor metabolic precursors and genetically modified toxogenic bacteria lacking enzymes required to metabolize the toxin inhibitor metabolic precursors.

AN 2002:295294 USPATFULL

TI Method for the production of bacterial toxins

IN Blake, Milan S., Fulton, MD, UNITED STATES

Bogdan, John A., JR., Westminster, MD, UNITED STATES

Nazario-Larrieu, Javier, Rio Piedras, PR, UNITED STATES

PI US 2002165344 A1 20021107

AI US 2001-825769 A1 20010404 (9)

PRAI US 2000-194478P 20000404 (60)

DT Utility

FS APPLICATION

LREP Baxter Healthcare Corporation, P.O. Box 15210, Irvine, CA, 92614

CLMN Number of Claims: 8

ECL Exemplary Claim: 1

DRWN 13 Drawing Page(s)

LN.CNT 956

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 2 OF 35 USPATFULL

AB The present invention relates to a histidine kinase, two-component gene (CaHK1) from *Candida albicans*. CaHK1 encodes a 2471 amino acid protein with an estimated molecular mass of 281.8 kDa. Also provided are vectors, host cells, antibodies and recombinant methods for producing the same. The invention further relates agonists and antagonists and to screening methods for identifying agonists and antagonists of CaHK1 polypeptide activity. The invention additionally relates to diagnostic methods for detecting CaHK1 nucleic acids, polypeptides, and antibodies

in a biological sample. The present invention further relates to novel antagonists and vaccines for the prevention or attenuation of infection by *Candida albicans*.

AN 2002:265862 USPATFULL
TI Histidine kinase two-component in candida albicans
IN Abad, Antonio Jose C., Washington, DC, UNITED STATES
Choi, Gil H., Rockville, MD, UNITED STATES
Calderone, Richard A., Washington, DC, UNITED STATES
PA Human Genome Sciences, Inc., Rockville, MD (U.S. corporation)
PI US 2002146738 A1 20021010
AI US 2002-116048 A1 20020405 (10)
RLI Division of Ser. No. US 1999-419291, filed on 15 Oct 1999, PENDING
Division of Ser. No. US 1998-112450, filed on 9 Jul 1998, GRANTED, Pat.
No. US 6120999
PRAI US 1998-74308P 19980211 (60)
US 1997-52273P 19970710 (60)
DT Utility
FS APPLICATION
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 21 Drawing Page(s)
LN.CNT 3802
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 3 OF 35 USPATFULL

AB The present invention provides polynucleotide sequences of the genome of *Enterococcus faecalis*, polypeptide sequences encoded by the polynucleotide sequences, corresponding polynucleotides and polypeptides, vectors and hosts comprising the polynucleotides, and assays and other uses thereof. The present invention further provides polynucleotide and polypeptide sequence information stored on computer readable media, and computer-based systems and methods which facilitate its use.

AN 2002:221971 USPATFULL
TI ENTEROCOCCUS FAECALIS POLYNUCLEOTIDES AND POLYPEPTIDES
IN KUNSCH, CHARLES A., ATLANTA, GA, UNITED STATES
DILLON, PATRICK J., CARLSBAD, CA, UNITED STATES
BARASH, STEVEN, ROCKVILLE, MD, UNITED STATES
PI US 2002120116 A1 20020829
AI US 1998-70927 A1 19980504 (9)
DT Utility
FS APPLICATION
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 13315
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 4 OF 35 USPATFULL

AB The present invention relates to novel genes from *S. aureus* and the polypeptides they encode. Also provided are vectors, host cells, antibodies and recombinant methods for producing the same. The invention further relates to screening methods for identifying agonists and antagonists of *S. aureus* polypeptide activity. The invention additionally relates to diagnostic methods for detecting *Staphylococcus* nucleic acids, polypeptides and antibodies in a biological sample. The present invention further relates to novel vaccines for the prevention or attenuation of infection by *Staphylococcus*.

AN 2002:192264 USPATFULL
TI *Staphylococcus aureus* polynucleotides and polypeptides
IN Choi, Gil H., Rockville, MD, UNITED STATES
PI US 2002103338 A1 20020801

AI US 2001-925637 A1 20010810 (9)
 RLI Continuation-in-part of Ser. No. WO 2000-US23773, filed on 31 Aug 2000,
 UNKNOWN Continuation-in-part of Ser. No. US 1997-781986, filed on 3 Jan
 1997, PENDING Continuation-in-part of Ser. No. US 1997-956171, filed on
 20 Oct 1997, PENDING
 PRAI US 1999-151933P 19990901 (60)
 US 1996-9861P 19960105 (60)
 US 1996-9861P 19960105 (60)
 DT Utility
 FS APPLICATION
 LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
 CLMN Number of Claims: 96
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 9945
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 5 OF 35 USPATFULL

AB A novel costimulatory protein molecule, B7-DC, which is a member of the
 B7 family, is described as is DNA coding therefor and expression vectors
 comprising this DNA. B7-DC protein, fragments, fusion
 polypeptides/proteins and other functional derivatives, and transformed
 cells expressing B7-DC are useful in vaccine compositions and methods.
 Compositions and methods are disclosed for inducing potent T cell
 mediated responses that can be harnessed for anti-tumor and anti-viral
 immunity.
 AN 2002:172486 USPATFULL
 TI Dendritic cell co-stimulatory molecules
 IN Pardoll, Drew M., Brookville, MD, UNITED STATES
 Tsuchiya, Haruo, Baltimore, MD, UNITED STATES
 Gorski, Kevin S., Baltimore, MD, UNITED STATES
 Tseng, Su-Yi, Baltimore, MD, UNITED STATES
 PI US 2002091246 A1 20020711
 AI US 2001-794210 A1 20010228 (9)
 PRAI US 2000-200580P 20000428 (60)
 US 2000-240169P 20001013 (60)
 DT Utility
 FS APPLICATION
 LREP VENABLE, Post Office Box 34385, Washington, DC, 20043-9998
 CLMN Number of Claims: 120
 ECL Exemplary Claim: 1
 DRWN 8 Drawing Page(s)
 LN.CNT 3534
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 6 OF 35 USPATFULL

AB A method employing a composition comprising a 2 to 10 base synthetic
 oligonucleotide sequence selected from the group consisting of
 (GG).sub.n, (GT).sub.n, a(GT).sub.nb, a(GA).sub.nb, and a(GC).sub.nb,
 wherein n is an integer between 1 and 3, and a and b are independently
 either none or one or more As, Cs, Gs, or Ts, or combinations thereof,
 for modulation of Fas and FasL expression or for modulation of the
 efficacy of therapeutic agents. The composition is administered to an
 animal or human with a pharmaceutically acceptable carrier, and
 optionally with a therapeutic agent, in an amount effective to modulate
 Fas and FasL expression, to treat the disease, or to modulate efficacy
 of the therapeutic agent.
 AN 2002:172338 USPATFULL
 TI Modulation of Fas and FasL expression
 IN Phillips, Nigel C., Pointe-Claire, CANADA
 Filion, Mario C., Laval, CANADA
 PI US 2002091095 A1 20020711
 AI US 2001-879668 A1 20010612 (9)
 PRAI WO 2000-CA1467 20001212

US 2000-228925P 20000829 (60)
US 1999-170325P 19991213 (60)
US 2001-266229P 20010202 (60)

DT Utility

FS APPLICATION

LREP Attn: John S. Pratt, KILPATRICK STOCKTON LLP, Suite 2800, 1100 Peachtree Street, Atlanta, GA, 30309-4530

CLMN Number of Claims: 19

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 899

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 7 OF 35 USPATFULL

AB The present invention relates, at least in part, to methods of modulating proliferation and apoptotic state of cells using agents that modulate the expression and/or activity of TRADE family polypeptides. In addition, the invention provides two novel members of the TRADE family of molecules.

AN 2002:133838 USPATFULL

TI Trade molecules and uses related thereto

IN Wood, Clive, Boston, MA, UNITED STATES

Chaudhary, Divya, Andover, MA, UNITED STATES

Long, Andrew, Chelmsford, MA, UNITED STATES

PI US 2002068696 A1 20020606

AI US 2001-780532 A1 20010209 (9)

PRAI US 2000-181922P 20000211 (60)

US 2000-182148P 20000214 (60)

DT Utility

FS APPLICATION

LREP LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109

CLMN Number of Claims: 38

ECL Exemplary Claim: 1

DRWN 16 Drawing Page(s)

LN.CNT 5929

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 8 OF 35 USPATFULL

AB Methods and compositions are provided for the enhanced production of bacterial toxins in large-scale cultures. Specifically, methods and compositions for reducing bacterial toxin expression **inhibitors** are providing including, but not limited to, addition of toxin expression inhibitor binding compounds, culture media having reduced concentrations of toxin inhibitor metabolic precursors and genetically modified toxogenic bacteria lacking enzymes required to metabolize the toxin inhibitor metabolic precursors.

AN 2002:119572 USPATFULL

TI Method for the production of bacterial toxins

IN Blake, Milan S., Fulton, MD, UNITED STATES

Bogdan, John A., JR., Westminster, MD, UNITED STATES

Nazario-Larrieu, Javier, Rio Piedras, PR, UNITED STATES

PI US 2002061555 A1 20020523

AI US 2001-825770 A1 20010404 (9)

PRAI US 2000-194482P 20000404 (60)

DT Utility

FS APPLICATION

LREP Baxter Healthcare Corporation, P.O. Box 15210, Irvine, CA, 92614

CLMN Number of Claims: 28

ECL Exemplary Claim: 1

DRWN 13 Drawing Page(s)

LN.CNT 1015

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 9 OF 35 USPATFULL

AB The present invention relates to novel vaccines for the prevention or attenuation of infection by Streptococcus pneumoniae. The invention further relates to isolated nucleic acid molecules encoding antigenic polypeptides of Streptococcus pneumoniae. Antigenic polypeptides are also provided, as are vectors, host cells and recombinant methods for producing the same. The invention additionally relates to diagnostic methods for detecting Streptococcus nucleic acids, polypeptides and antibodies in a biological sample.

AN 2002:119562 USPTAFULL

TI Streptococcus pneumoniae antigens and vaccines

IN Choi, Gil H., Rockville, MD, UNITED STATES
 Kunsch, Charles A., Norcross, GA, UNITED STATES
 Barash, Steven C., Rockville, MD, UNITED STATES
 Dillon, Patrick J., Carlsbad, CA, UNITED STATES
 Dougherty, Brian, Killingworth, CT, UNITED STATES
 Fannon, Michael R., Silver Spring, MD, UNITED STATES
 Rosen, Craig A., Laytonsville, MD, UNITED STATES

PI US 2002061545 A1 20020523

AI US 2001-765272 A1 20010122 (9)

RLI Continuation of Ser. No. US 1997-961083, filed on 30 Oct 1997, UNKNOWN

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 21

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 5297

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 10 OF 35 USPTAFULL

AB The invention provides novel methods for treating disease based upon the medicinal use of lipids and phospholipids covalently bound to physiologically acceptable monomers or polymers. Phosphatidylethanolamine moieties conjugated to physiologically acceptable monomers and polymers (PE conjugates) manifest an unexpectedly wide range of pharmacological effects, including stabilizing cell membranes; limiting oxidative damage to cell and blood components; limiting cell proliferation, cell extravasation and (tumor) cell migratory behavior; suppressing immune responses; and attenuating physiological reactions to stress, as expressed in elevated chemokine levels. The surprisingly manifold pharmacological properties of the PL-conjugates allow for the invention, disclosed herein, of novel methods for the treatment of a diverse range of disease states, including obstructive respiratory disease, including asthma; colitis and Crohn's disease; central nervous system insult, including blood brain barrier compromise, ischemic stroke, and multiple sclerosis; contact dermatitis; psoriasis; cardiovascular disease, including ischemic conditions and prophylaxis for invasive vascular procedures; cellular proliferative disorders, including anti-tumor vasculogenesis, invasiveness, and metastases; anti-oxidant therapy; hemolytic syndromes; sepsis; acute respiratory distress syndrome; tissue transplant rejection syndromes; autoimmune disease; viral infection; and hypersensitivity conjunctivitis. The therapeutic methods of the invention include administration of phosphatidylethanolamine bound to carboxymethylcellulose, heparin, hyaluronic acid, polyethylene glycol, and hemacel. Disclosed herein are also new compounds comprised of phospholipid moieties bound to low molecular weight monomers and dimers, including mono- and disaccharides, carboxylated disaccharides, mono- and dicarboxylic acids, salicylates, bile acids, and fatty acids.

AN 2002:92659 USPTAFULL

TI Use of lipid conjugates in the treatment of disease

IN Yedgar, Saul, Jerusalem, ISRAEL
 Shuseyov, David, Carmei Yossef, ISRAEL
 Golomb, Gershon, Efrat, ISRAEL

Reich, Reuven, Rehovot, ISRAEL
Ginsburg, Isaac, Jerusalem, ISRAEL
Higazi, Abd-al-Roof, Shimshon, ISRAEL
Ligumski, Moshe, Jerusalem, ISRAEL
Krimsky, Miron, Jerusalem, ISRAEL
Ojcius, David, Vincennes, FRANCE
Yard, Benito Antonio, Freinsheim, GERMANY, FEDERAL REPUBLIC OF
van der Woude, Fokko Johannes, Hirschberg-Leutershausen, GERMANY,
FEDERAL REPUBLIC OF
Schnitzer, Edit, Tel Aviv, ISRAEL

PI US 2002049183 A1 20020425
AI US 2001-756765 A1 20010110 (9)
PRAI US 2000-174907P 20000110 (60)
US 2000-174905P 20000110 (60)
DT Utility
FS APPLICATION
LREP Eitan, Pearl, Latzer, & Cohen-Zedek, One Crystal Park, Suite 210, 2011
Crystal Drive, Arlington, VA, 22202-3709
CLMN Number of Claims: 79
ECL Exemplary Claim: 1
DRWN 55 Drawing Page(s)
LN.CNT 3838
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 11 OF 35 USPATFULL

AB The present invention relates to novel genes from *E. faecalis* and the polypeptides they encode. Also provided as are vectors, host cells, antibodies and methods for producing the same. The invention further relates to screening methods for identifying agonists and antagonists of *E. faecalis* polypeptide activity. The invention additionally relates to diagnostic methods for detecting *Enterococcus* nucleic acids, polypeptides and antibodies in a biological sample. The present invention further relates to novel vaccines for the prevention or attenuation of infection by *Enterococcus*.

AN 2002:85691 USPATFULL
TI ENTEROCOCCUS FAECALIS POLYNUCLEOTIDES AND POLYPEPTIDES
IN CHOI, GIL H., ROCKVILLE, MD, UNITED STATES
BAILEY, CAMELLA, TAKOMA PARK, MD, UNITED STATES
HROMOCKYJ, ALEX, N. POTOMAC, MD, UNITED STATES
KUNSCH, CHARLES A., NORCROSS, GA, UNITED STATES
PA HUMAN GENOME SCIENCES, INC. (U.S. corporation)
PI US 2002045737 A1 20020418
US 6448043 B2 20020910
AI US 1998-71035 A1 19980504 (9)
DT Utility
FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 12421
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 12 OF 35 USPATFULL

AB The invention provides an antibody-toxic moiety conjugates comprising an antibody that specifically recognizes a molecule expressed on the surface of a T cell which is expressed only on T cells and is only expressed transiently on T cells upon T cell activation. Preferably, the T cell molecule is CTLA4. The invention further provides anti-CTLA4 antibodies and humanized forms thereof.

AN 2002:72444 USPATFULL
TI Antibodies against CTLA4 and uses therefor
IN Carreno, Beatriz M., Acton, MA, UNITED STATES
Wood, Clive, Boston, MA, UNITED STATES

Turner, Katherine, Acton, MA, UNITED STATES
Collins, Mary, Natick, MA, UNITED STATES
Gray, Gary S., Brookline, MA, UNITED STATES
Morris, Donna, Salem, NH, UNITED STATES
O'Hara, Denise, Reading, MA, UNITED STATES
Hinton, Paul R., Fremont, CA, UNITED STATES
Tsurushita, Naoya, Palo Alto, CA, UNITED STATES

PI US 2002039581 A1 20020404
AI US 2001-772103 A1 20010126 (9)
PRAI US 2000-178473P 20000127 (60)
DT Utility
FS APPLICATION
LREP LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 11 Drawing Page(s)
LN.CNT 3594
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 13 OF 35 USPATFULL

AB The present invention relates to peptides which exhibit potent anti-viral activity. In particular, the invention relates to methods of using such peptides as inhibitory of respiratory syncytial virus ("RSV") transmission to uninfected cells. The peptides used in the methods of the invention are homologs of the DP-178 and DP-107 peptides, peptides corresponding to amino acid residues 638 to 673, and to amino acid residues 558 to 595, respectively, of the HIV-1.sub.LAI transmembrane protein (TM) gp41.

AN 2002:297296 USPATFULL

TI Methods for inhibition of membrane fusion-associated events, including respiratory syncytial virus transmission

IN Bolognesi, Dani Paul, Durham, NC, United States
Matthews, Thomas James, Durham, NC, United States
Wild, Carl T., Durham, NC, United States
Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States
Langlois, Alphonse J., Durham, NC, United States

PA Trimeris, Inc., Durham, NC, United States (U.S. corporation)

PI US 6479055 B1 20021112
AI US 1995-470896 19950606 (8)

RLI Continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994, now patented, Pat. No. US 6017536 Continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994 Continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933

DT Utility

FS GRANTED

EXNAM Primary Examiner: Stucker, Jeffrey

LREP Pennie & Edmonds LLP

CLMN Number of Claims: 44

ECL Exemplary Claim: 1

DRWN 84 Drawing Figure(s); 83 Drawing Page(s)

LN.CNT 26553

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 14 OF 35 USPATFULL

AB The present invention relates to a histidine kinase, two-component gene (CaHK1) from Candida albicans. CaHK1 encodes a 2471 amino acid protein with an estimated molecular mass of 281.8 kDa. Also provided are vectors, host cells, antibodies and recombinant methods for producing the same. The invention further relates agonists and antagonists and to screening methods for identifying agonists and antagonists of CaHK1 polypeptide activity. The invention additionally relates to diagnostic methods for detecting CaHK1 nucleic acids, polypeptides, and antibodies

in a biological sample. The present invention further relates to novel antagonists and vaccines for the prevention or attenuation of infection by *Candida albicans*.

AN 2002:168077 USPTFULL
TI Histidine kinase two-component in *Candida albicans*
IN Abad, Antonio Jose C., Washington, DC, United States
Choi, Gil H., Rockville, MD, United States
Calderone, Richard A., Washington, DC, United States
PA Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)
The Georgetown University, Washington, DC, United States (U.S. corporation)
PI US 6416989 B1 20020709
AI US 1999-419291 19991015 (9)
RLI Division of Ser. No. US 1998-112450, filed on 9 Jul 1998, now patented, Pat. No. US 6120999, issued on 19 Sep 2000
PRAI US 1997-52273P 19970710 (60)
US 1998-74308P 19980211 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Prouty, Rebecca E.; Assistant Examiner: Steadman, David J.
LREP Human Genome Sciences, Inc.
CLMN Number of Claims: 25
ECL Exemplary Claim: 1
DRWN 21 Drawing Figure(s); 21 Drawing Page(s)
LN.CNT 3751
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 15 OF 35 USPTFULL

AB The present invention relates to novel genes from *S. aureus* and the polypeptides they encode. Also provided as are vectors, host cells, antibodies and recombinant methods for producing the same. The invention further relates to screening methods for identifying agonists and antagonists of *S. aureus* polypeptide activity. The invention additionally relates to diagnostic methods for detecting *Staphylococcus* nucleic acids, polypeptides and antibodies in a biological sample. The present invention further relates to novel vaccines for the prevention or attenuation of infection by *Staphylococcus*.

AN 2002:136784 USPTFULL
TI *Staphylococcus aureus* genes and polypeptides
IN Bailey, Camella, Washington, DC, United States
Choi, Gil H., Rockville, MD, United States
PA Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)
PI US 6403337 B1 20020611
AI US 2000-512255 20000224 (9)
RLI Continuation-in-part of Ser. No. WO 1999-US19726, filed on 31 Aug 1999
Continuation-in-part of Ser. No. US 1997-956171, filed on 20 Oct 1997
Continuation-in-part of Ser. No. US 1997-781986, filed on 3 Jan 1997
Continuation-in-part of Ser. No. US 1997-781986, filed on 5 Jan 1997
Continuation-in-part of Ser. No. US 1997-781986, filed on 5 Jan 1997
DT Utility
FS GRANTED
EXNAM Primary Examiner: Brusca, John S.
LREP Human Genome Sciences, Inc.
CLMN Number of Claims: 65
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 6784
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 16 OF 35 USPTFULL

AB Human chemokine Beta-10 polypeptides and DNA (RNA) encoding such

chemokine polypeptides and a procedure for producing such polypeptides by recombinant techniques is disclosed. Also disclosed are methods for utilizing such chemokine polypeptides for the treatment of leukemia, tumors, chronic infections, autoimmune disease, fibrotic disorders, wound healing and psoriasis. Antagonists against such chemokine polypeptides and their use as a therapeutic to treat rheumatoid arthritis, autoimmune and chronic inflammatory and infective diseases, allergic reactions, prostaglandin-independent fever and bone marrow failure are also disclosed.

AN 2002:116027 USPTAFULL
TI Human chemokine beta-10 mutant polypeptides
IN Olsen, Henrik S., Gaithersburg, MD, United States
Li, Haodong, Gaithersburg, MD, United States
Adams, Mark D., North Potomac, MD, United States
Gentz, Solange H. L., Rockville, MD, United States
Alderson, Ralph, Gaithersburg, MD, United States
Li, Yuling, Germantown, MD, United States
Parmelee, David, Rockville, MD, United States
White, John R., Coatsville, PA, United States
Appelbaum, Edward R., Blue Bell, PA, United States
PA Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)
SmithKline Beecham, Corp., King of Prussia, PA, United States (U.S. corporation)
PI US 6391589 B1 20020521
AI US 2000-479729 20000107 (9)
RLI Continuation-in-part of Ser. No. US 1995-462967, filed on 5 Jun 1995, now abandoned Continuation-in-part of Ser. No. US 1995-458355, filed on 2 Jun 1995, now patented, Pat. No. US 5981230 Continuation-in-part of Ser. No. WO 1994-US9484, filed on 23 Aug 1994
PRAI US 1999-115439P 19990108 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Mertz, Prema
LREP Human Genome Sciences, Inc.
CLMN Number of Claims: 50
ECL Exemplary Claim: 1
DRWN 21 Drawing Figure(s); 14 Drawing Page(s)
LN.CNT 11904
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 17 OF 35 CAPLUS COPYRIGHT 2002 ACS

AB Methods and compns. are provided for the enhanced prodn. of bacterial toxins in large-scale cultures. Specifically, methods and compns. for reducing bacterial toxin expression **inhibitors** are provided including, but not limited to, addn. of toxin expression inhibitor binding compds., culture media having reduced concns. of toxin inhibitor metabolic precursors and genetically modified toxigenic bacteria lacking enzymes required to metabolize the toxin inhibitor metabolic precursors.

AN 2001:747833 CAPLUS
DN 135:302952
TI Improved method for the production of bacterial toxins
IN Blake, Milan S.; Bogdan, John A., Jr.; Nazario-Larrieu, Javier
PA Baxter International Inc., USA; Baxter Healthcare S.A.
SO PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001074862	A2	20011011	WO 2001-US10938	20010404
	WO 2001074862	A3	20021003		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
 HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
 LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
 RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,
 YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002061555 A1 20020523 US 2001-825770 20010404
 US 2002165344 A1 20021107 US 2001-825769 20010404
 PRAI US 2000-194478P P 20000404
 US 2000-194482P P 20000404

L13 ANSWER 18 OF 35 USPATFULL

AB The bacterial phosphotransferase system (PTS) as a drug target system catalyses the uptake and phosphorylation of carbohydrates. It is further involved in signal transduction, e.g. catabolite repression, chemotaxis, and allosteric regulation of metabolic enzymes and transporters. It is ubiquitous in bacteria but does not occur in eukaryotes. This uniqueness and the pleiotropic function make the PTS a target for the development of new antimicrobials. Assays are described that lead to the discovery of compounds which uncouple the PTS, by acting as protein histidine/cysteine phosphatases. Uncoupling of the PTS leads to inhibition of carbohydrate transport, repression of catabolite controlled genes (e.g. certain virulence genes) and depletion of phosphoenolpyruvate. Compounds from combinatorial libraries with high affinity for phosphoenolpyruvate-protein-phosphatase (Enzyme 1) serve as lead structures for the development of **inhibitors** and uncouplers of the PTS.

AN 2001:86205 USPATFULL

TI Target system

IN Emi, Bernhard, Kaenelgasse 17, Zollikofen, Switzerland 3052

PI US 6245502 B1 20010612

AI US 1998-26904 19980219 (9)

PRAI EP 1997-102616 19970219

DT Utility

FS GRANTED

EXNAM Primary Examiner: Borin, Michael

CLMN Number of Claims: 8

ECL Exemplary Claim: 1

DRWN 5 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 1138

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 19 OF 35 USPATFULL

AB ##STR1## ##STR2##Cyclic peptide of formula (1) where Xaa.sub.1 is selected from L-amino acids selected from Phe, Lys and Arg, D-amino acids selected from Phe and Met, the L- and D-amino acid optionally substituted on its .alpha.-carbon or its .alpha.-amino group with a C.sub.1-4 alkyl group; and Melle; Xaa.sub.2, Xaa.sub.3 et Xaa.sub.4 are respectively Leu, Asp and Val, optionally substituted on their .alpha.-carbon or .alpha.-amino group with a C.sub.1-4 alkyl group; X.sup.1 is selected from D-amino acids selected from Ala, Phe, Arg, Lys, Trp, hArg(Et).sub.2, Orn(CHMe.sub.2), Orn(Me.sub.2), Lys(CHMe.sub.2) and Arg(Pmc), optionally substituted on their .alpha.-carbon or .alpha.-amino group with a C.sub.1-4 alkyl group; Formula (II); NH(CH.sub.2).sub.5 CO; and NH(CH.sub.2).sub.2 S(CH.sub.2).sub.y CO, where y is 1 or 2; X.sup.2 is selected from D-amino acids selected from Ala, Arg, Lys, His, hArg(Et).sub.2, Orn(CHMe.sub.2), and Orn(Me.sub.2), optionally substituted on their .alpha.-carbon or .alpha.-amino group with a C.sub.1-4 alkyl group; NH(CH.sub.2)SCH.sub.2 CO; and NH(CH.sub.2).sub.x CO, where x is 2 or 3; Xaa.sub.5 and Xaa.sub.6 are each independently a D-amino acid selected from Ala and Arg, optionally substituted on its .alpha.-carbon or .alpha.-amino group with a C.sub.1-4

alkyl group; p is 0 or 1; and q is 0 or when p is 1, q is 0 or 1; or a salt thereof. The cyclic peptides inhibit the interaction of vascular cell adhesion molecule-1 and fibronectin with integrin very late antigen 4 (.alpha.4.beta.61) and of mucosal addressin cell adhesion molecule-1 (MAdCAM-1) with integrin .alpha.4.beta.7. They have therapeutic applications such as in rheumatoid arthritis, multiple sclerosis, asthma, psoriasis, inflammatory bowel disease and insulin-dependent diabetes.

AN 2001:75364 USPTFULL
TI Cell adhesion inhibiting compounds
IN Dutta, Anand Swaroop, Macclesfield, United Kingdom
PA Zeneca Limited, London, United Kingdom (non-U.S. corporation)
PI US 6235711 B1 20010522
AI US 1998-202831 19981221 (9)
PRAI GB 1996-13112 19960621
DT Utility
FS Granted
EXNAM Primary Examiner: Carlson, Karen Cochrane; Assistant Examiner: Gupta, Anish
LREP Pillsbury Winthrop LLP
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 1825
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 20 OF 35 USPTFULL

AB The present invention relates to peptides which exhibit antifusogenic and antiviral activities. The peptides of the invention consist of a 16 to 39 amino acid region of a human respiratory syncytial virus protein. These regions were identified through computer algorithms capable of recognizing the ALLMOTI5, 107x178x4, or PLZIP amino acid motifs. These motifs are associated with the antifusogenic and antiviral activities of the claimed peptides.

AN 2001:67794 USPTFULL
TI Human respiratory syncytial virus peptides with antifusogenic and antiviral activities
IN Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States
PA Trimeris, Inc., Durham, NC, United States (U.S. corporation)
PI US 6228983 B1 20010508
AI US 1995-485264 19950607 (8)
RLI Division of Ser. No. US 1995-470896, filed on 6 Jun 1995
Continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994
Continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994
Continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933
DT Utility
FS Granted
EXNAM Primary Examiner: Scheiner, Laurie; Assistant Examiner: Parkin, Jeffrey S.
LREP Pennie & Edmonds LLP
CLMN Number of Claims: 62
ECL Exemplary Claim: 1
DRWN 84 Drawing Figure(s); 83 Drawing Page(s)
LN.CNT 32166
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 21 OF 35 USPTFULL

AB The present invention relates to proteins or polypeptides, referred to herein as isolated and/or recombinant mammalian (e.g., human) IP-10/Mig receptor proteins designated CXC Chemokine Receptor 3 (CXCR3) and variants thereof, including those characterized by selective binding of one or more chemokines (e.g., IP-10 and/or Mig), and/or the ability to

induce a cellular response (e.g., chemotaxis, exocytosis). Antibodies reactive with CXCR3 receptors can be produced using the proteins or variants thereof or host cells comprising same as immunogen.

Another aspect of the invention relates to isolated and/or recombinant nucleic acids encoding a mammalian (e.g., human) CXCR3 protein and variants thereof, including antisense nucleic acid, recombinant nucleic acid constructs, such as plasmids or retroviral vectors, comprising a nucleic acid which encodes a protein of the present invention or variant thereof, and to host cells comprising a nucleic acid or construct, useful in the production of recombinant proteins. Also encompassed are methods of identifying ligands, and **inhibitors** (e.g., antagonists) or promoters (e.g., agonists) of receptor function, including methods in which host cells comprising a nucleic acid encoding a CXCR3 or variant thereof are used in an assay to identify and assess the efficacy of ligands, **inhibitors** or promoters.

Inhibitors and promoters of receptor function can be used to modulate receptor activity, permitting selective inhibition of lymphocyte function, particularly of effector cells such as activated T lymphocytes and NK cells for therapeutic purposes.

AN 2001:18604 USPATFULL
TI IP-10/Mig receptor designated CXCR3, antibodies, nucleic acids, and methods of use therefor
IN Loetscher, Marcel, Koeniz, Switzerland
Moser, Bernhard, Stettlen, Switzerland
Qin, Shixin, Lexington, MA, United States
Mackay, Charles R., Watertown, MA, United States
PA Millennium Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation)
Theodor-Kocher Institute, Bern, Switzerland (non-U.S. corporation)
PI US 6184358 B1 20010206
AI US 1997-829839 19970331 (8)
RLI Continuation-in-part of Ser. No. US 1996-709838, filed on 10 Sep 1996
DT Utility
FS Granted
EXNAM Primary Examiner: Mertz, Prema; Assistant Examiner: Murphy, Joseph F.
LREP Hamilton, Brook, Smith & Reynolds, P.C.
CLMN Number of Claims: 47
ECL Exemplary Claim: 1
DRWN 41 Drawing Figure(s); 17 Drawing Page(s)
LN.CNT 3172
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 22 OF 35 MEDLINE

AB **Pertussis toxin (Ptx)** expression and secretion in **Bordetella pertussis** are regulated by a two-component signal transduction system encoded by the bvg regulatory locus. However, it is not known whether the metabolic pathways and growth state of the bacterium influence synthesis and secretion of Ptx and other virulence factors. We have observed a reduction in the concentration of Ptx per optical density unit midway in fermentation. Studies were conducted to identify possible factors causing this reduction and to develop culture conditions that optimize Ptx expression. Medium reconstitution experiments demonstrated that spent medium and a fraction of this medium containing components with a molecular weight of <3,000 inhibited the production of Ptx. A complete flux analysis of the intermediate metabolism of *B. pertussis* revealed that the sulfur-containing amino acids methionine and **cysteine** and the organic acid pyruvate accumulated in the media. In fermentation, a large amount of internal sulfate (SO₄(2-)) was observed in early stage growth, followed by a rapid decrease as the cells entered into logarithmic growth. This loss was later followed by the accumulation of large quantities of SO₄(2-) into the media in late-stage fermentation. Release of SO₄(2-) into the media by the cells signaled the decoupling of cell growth and Ptx production. Under conditions that limited **cysteine**

, a fivefold increase in Ptx production was observed. Addition of barium chloride (BaCl₂) to the culture further increased Ptx yield. Our results suggest that *B. pertussis* is capable of autoregulating the activity of the bvg regulon through its metabolism of **cysteine**. Reduction of the amount of **cysteine** in the media results in prolonged vir expression due to the absence of the negative inhibitor SO₄(²⁻). Therefore, the combined presence and metabolism of **cysteine** may be an important mechanism in the pathogenesis of *B. pertussis*.

AN 2001551434 MEDLINE
DN 21481958 PubMed ID: 11598055
TI **Bordetella pertussis** autoregulates **pertussis toxin** production through the metabolism of **cysteine**.
AU Bogdan J A; Nazario-Larrieu J; Sarwar J; Alexander P; Blake M S
CS Baxter Healthcare Corporation, Columbia, Maryland 21046-2358, USA..
John_Bogdan@Baxter.com
SO INFECTION AND IMMUNITY, (2001 Nov) 69 (11) 6823-30.
Journal code: 0246127. ISSN: 0019-9567.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200112
ED Entered STN: 20011015
Last Updated on STN: 20020122
Entered Medline: 20011205

L13 ANSWER 23 OF 35 USPATFULL

AB The present invention relates to novel vaccines for the prevention or attenuation of infection by *Streptococcus pneumoniae*. The invention further relates to isolated nucleic acid molecules encoding antigenic polypeptides of *Streptococcus pneumoniae*. Antigenic polypeptides are also provided, as are vectors, host cells and recombinant methods for producing the same. The invention additionally relates to diagnostic methods for detecting *Streptococcus* nucleic acids, polypeptides and antibodies in a biological sample.

AN 2000:167517 USPATFULL
TI *Streptococcus pneumoniae* antigens and vaccines
IN Choi, Gil H., Rockville, MD, United States
Kunsch, Charles A., Atlanta, GA, United States
Barash, Steven C., Rockville, MD, United States
Dillon, Patrick J., Carlsbad, CA, United States
Dougherty, Brian, Killingworth, CT, United States
Fannon, Michael R., Silver Spring, MD, United States
Rosen, Craig A., Laytonsville, MD, United States
PA Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)
PI US 6159469 20001212
AI US 1997-961083 19971030 (8)
PRAI US 1996-29960P 19961031 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Housel, James C.; Assistant Examiner: Hines, Ja-Na A.
LREP Human Genome Sciences, Inc.
CLMN Number of Claims: 73
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 13121
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 24 OF 35 USPATFULL

AB The present invention relates to methods of identifying ligands, and **inhibitors** (e.g., antagonists) or promoters (e.g., agonists) of receptor function, including methods in which host cells comprising a nucleic acid encoding a CXCR3 or variant thereof are used in an assay to

identify and assess the efficacy of ligands, **inhibitors** or promoters. **Inhibitors** and promoters of receptor function can be used to modulate receptor activity, permitting selective inhibition of lymphocyte function, particularly of effector cells such as activated T lymphocytes and NK cells for therapeutic purposes.

AN 2000:146110 USPATFULL
TI Method of detecting or identifying ligands, **inhibitors** or promoters of CXC chemokine receptor 3
IN Loetscher, Marcel, Koeniz, Switzerland
Moser, Bernhard, Stettlen, Switzerland
PA Theodor-Kocher Institute, Bern, Switzerland (non-U.S. corporation)
PI US 6140064 20001031
AI US 1996-709838 19960910 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Mertz, Prema; Assistant Examiner: Murphy, Joseph F.
LREP Hamilton, Brook, Smith & Reynolds, P.C.
CLMN Number of Claims: 88
ECL Exemplary Claim: 1
DRWN 7 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 2876
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 25 OF 35 USPATFULL

AB The present invention relates to a histidine kinase, two-component gene (CaHK1) from *Candida albicans*. CaHK1 encodes a 2471 amino acid protein with an estimated molecular mass of 281.8 kDa. Also provided are vectors, host cells, antibodies and recombinant methods for producing the same. The invention further relates to agonists and antagonists and to screening methods for identifying agonists and antagonists of CaHK1 polypeptide activity. The invention additionally relates to diagnostic methods for detecting CaHK1 nucleic acids, polypeptides, and antibodies in a biological sample. The present invention further relates to novel antagonists and vaccines for the prevention or attenuation of infection by *Candida albicans*.

AN 2000:124777 USPATFULL
TI Histidine kinase two-component in *Candida albicans*
IN Abad, Antonio Jose C., Washington, DC, United States
Choi, Gil H., Rockville, MD, United States
Calderone, Richard A., Washington, DC, United States
PA Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)
The Georgetown University, Washington, DC, United States (U.S. corporation)
PI US 6120999 20000919
AI US 1998-112450 19980709 (9)
PRAI US 1997-52273P 19970710 (60)
US 1998-74308P 19980211 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Myers, Carla J.; Assistant Examiner: Johannsen, Diana
LREP Hoover, Kenley K.
CLMN Number of Claims: 20
ECL Exemplary Claim: 5
DRWN 5 Drawing Figure(s); 21 Drawing Page(s)
LN.CNT 3683
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 26 OF 35 USPATFULL

AB Yeast cells are engineered to express both a surrogate of a pheromone system protein (e.g., enzymes involved in maturation of α -factor, transporters of α -factor, pheromone receptors, etc.) and a potential peptide modulator of the surrogate, in such a manner that the inhibition or activation of the surrogate affects a screenable or selectable trait

of the yeast cells. Various additional features improve the signal-to-noise ratio of the screening/selection system.

AN 2000:102075 USPATFULL
TI Yeast cells engineered to produce pheromone system protein surrogates, and uses therefor
IN Fowlkes, Dana Merriman, New York, NY, United States
Broach, Jim, New York, NY, United States
Manfredi, John, New York, NY, United States
Klein, Christine, New York, NY, United States
Murphy, Andrew J., Montclair, NJ, United States
Paul, Jeremy, Palisades, NY, United States
Trueheart, Joshua, South Nyack, NY, United States
PA Cadus Pharmaceutical Corporation, Tarrytown, NY, United States (U.S. corporation)
PI US 6100042 20000808
AI US 1994-322137 19941013 (8)
RLI Continuation-in-part of Ser. No. US 1994-309313, filed on 20 Sep 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-190328, filed on 31 Jan 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-41431, filed on 31 Mar 1993, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Ulm, John
LREP Lahive & Cockfield, LLP, Lauro, Esq., Peter C., Kara, Catherine J.
CLMN Number of Claims: 48
ECL Exemplary Claim: 1
DRWN 11 Drawing Figure(s); 13 Drawing Page(s)
LN.CNT 6899
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 27 OF 35 USPATFULL

AB Cyclic dimeric peptides of formula (I) ##STR1## wherein: peptide 1 and peptide 2 independently represent a tetrapeptide of formula -AA1-AA2-AA3-AA4- juxtaposed in parallel or antiparallel orientation; AA1 is an L or D amino acid selected from Ile, Leu and amino analogues thereof selected from Pro, Gly, Tic and Phe; AA2 is an L amino acid selected from Leu and amino acid analogues thereof selected from Ile, Phe and Val; AA3 is an L amino acid selected from Asp, Glu and amino acid analogues thereof; AA4 is an L amino acid selected from Val and amino acid analogues thereof selected from Leu, Ile, Phe and Cha (cyclohexylalanine); L1 and L2 independently represent linking moieties for linking peptides 1 and 2 to form a cyclic dipeptide; or salts thereof. The cyclic dipeptides inhibit the interaction of vascular cell adhesion molecule-1 and fibronectin with integrin very late antigen 4 and have therapeutic applications such as in rheumatoid arthritis, asthma or multiple sclerosis.

AN 2000:27953 USPATFULL
TI Peptide **inhibitors** of fibronectine
IN Dutta, Anand Swaroop, Macclesfield, United Kingdom
PA Zeneca Limited, London, United Kingdom (non-U.S. corporation)
PI US 6034057 20000307
WO 9702289 19970123
AI US 1998-981680 19980106 (8)
WO 1996-GB1580 19960702
19980106 PCT 371 date
19980106 PCT 102(e) date
PRAI GB 1995-13798 19950706
GB 1996-11470 19960601
DT Utility
FS Granted
EXNAM Primary Examiner: Celsa, Bennett
LREP Pillsbury Madison & Sutro, LLP
CLMN Number of Claims: 16

ECL Exemplary Claim: 1
DRWN 17 Drawing Figure(s); 11 Drawing Page(s)
LN.CNT 1948
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 28 OF 35 USPATFULL

AB Cyclic peptides of formula (1): ##STR1## Wherein: AA1 is an L or D amino acid selected from Ile and Leu or amino acid analogue thereof; AA2 is an L amino acid selected from Leu or amino acids analogue thereof; AA3 is an L amino acid selected from Asp or amino acid analogue thereof containing a carboxy group in its side chain; AA4 is an L amino acid selected from Val or amino acid analogue thereof and; LINKER represents a linking moiety for linking N terminus of AA1 to C terminus of AA4 to form a cyclic peptide containing a heterocyclic ring having 17 to 30 members. The cyclic peptides inhibit the interaction of vascular cell adhesion molecule-1 and fibronectin with integrin very late antigen 4 and have therapeutic applications such as in rheumatoid arthritis or multiple sclerosis.

AN 2000:27952 USPATFULL

TI Fibronectin adhesion **inhibitors**

IN Dutta, Anand Swaroop, Macclesfield, United Kingdom

PA Zeneca Limited, London, United Kingdom (non-U.S. corporation)

PI US 6034056 20000307

WO 9620216 19960704

AI US 1997-860248 19970624 (8)

WO 1995-GB2992 19951221

19970624 PCT 371 date

19970624 PCT 102(e) date

PRAI GB 1994-26254 19941224

GB 1995-5905 19950324

GB 1995-13904 19950707

DT Utility

FS Granted

EXNAM Primary Examiner: Tsang, Cecilia J.

LREP Phillipsbury Madison & Sutro, LLPIntellectual Property Group

CLMN Number of Claims: 12

ECL Exemplary Claim: 1

DRWN 16 Drawing Figure(s); 22 Drawing Page(s)

LN.CNT 3750

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 29 OF 35 USPATFULL

AB The present invention describes peptides capable of specifically binding to preselected micromolecules or to their natural receptor. The preselected molecules include but are not limited to drugs, vitamins, neuromediators and steroid hormones. Methods of using the phage display libraries to identify peptide compositions in preselected binding interactions are also disclosed. The retrieved peptides mimicking a natural receptor binding site to preselected molecules are used as is or as ligands to re-screen the same or different libraries to find and/or derive new receptor ligands, or are used to elicit the production of antibodies capable of binding to the natural receptor. The two categories of effector molecules (peptides or antibodies) may find diagnostic, therapeutic or prophylactic uses. The peptides directly derived from the phage display libraries may be used as drug detectors or antidotes. The others may be used to identify, target, activate or neutralize the receptor for the preselected micromolecules, the receptor being known or unknown.

AN 2000:24745 USPATFULL

TI Methods of generating novel peptides

IN Mandeville, Rosemonde, Ste. Therese, Canada

Popkov, Mikhail, St. Laurent, Canada

PA Biophage, Inc., Montreal, Canada (non-U.S. corporation)

PI US 6031071 20000229

AI US 1996-590897 19960124 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: MacMillan, Keith; Assistant Examiner: Ponnaluri, P.
LREP Mathews, Collins, Shepherd & Gould, P.C.
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN 9 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 1276
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 30 OF 35 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 2001:162545 BIOSIS
DN PREV200100162545
TI AB5 toxins: Structures and inhibitor design.
AU Fan, Erkang (1); Merritt, Ethan A. (1); Verlinde, Christophe L. M. J. (1);
Hol, Wim G. J. (1)
CS (1) Department of Biological Structure, Biomolecular Structure Center,
University of Washington, Seattle, WA, 98195 USA
SO Current Opinion in Structural Biology, (December, 2000) Vol. 10, No. 6,
pp. 680-686. print.
ISSN: 0959-440X.
DT Article
LA English
SL English

L13 ANSWER 31 OF 35 USPATFULL
AB The invention features methods and compositions for inducing protective
and/or therapeutic immune responses to an antigen in a mammal. In these
methods, an antigen is administered to the mammal with a toxin of a
Clostridium (e.g., C. difficile), or a fragment or derivative thereof
having adjuvant activity.
AN 1999:75321 USPATFULL
TI Clostridium difficile toxins as mucosal adjuvants
IN Thomas, Jr., William D., Winchester, MA, United States
Monath, Thomas P., Harvard, MA, United States
Zhang, Zhenxi, Cambridge, MA, United States
Torres-Lopez, Francisco Javier, San Clemente, Mexico
Lei, Wende, Cambridge, MA, United States
Lyerly, David M., Radford, VA, United States
Moncrief, James S., Christiansburg, VA, United States
PA OraVax, Inc., Cambridge, MA, United States (U.S. corporation)
PI US 5919463 19990706
AI US 1995-543708 19951016 (8)
RLI Continuation-in-part of Ser. No. US 1995-499384, filed on 7 Jul 1995,
now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Hutzell, Paula K.; Assistant Examiner: Masood, Khalid
LREP Clark & Elbing LLP
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN 18 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 992
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 32 OF 35 USPATFULL
AB Yeast cells are engineered to express both a surrogate of a pheromone
system protein (e.g., enzymes involved in maturation of α -factor,
transporters of α -factor, pheromone receptors, etc.) and a potential
peptide modulator of the surrogate, in such a manner that the inhibition
or activation of the surrogate affects a screenable or selectable trait
of the yeast cells. Various additional features improve the
signal-to-noise ratio of the screening/selection system.

AN 1999:27415 USPATFULL
TI Yeast cells engineered to produce pheromone system protein surrogates and uses therefor
IN Fowlkes, Dana M., Chapel Hill, NC, United States
Broach, Jim, Princeton, NJ, United States
Manfredi, John, Ossining, NY, United States
Klein, Christine, Ossining, NY, United States
Murphy, Andrew J., Montclair, NJ, United States
Paul, Jeremy, South Nyack, NY, United States
Trueheart, Joshua, South Nyack, NY, United States
PA Cadus Pharmaceutical Corporation, Tarrytown, NY, United States (U.S. corporation)
PI US 5876951 19990302
AI US 1995-461598 19950605 (8)
RLI Continuation-in-part of Ser. No. US 1994-322137, filed on 13 Oct 1994 which is a continuation-in-part of Ser. No. US 1994-309313, filed on 20 Sep 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-190328, filed on 31 Jan 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-41431, filed on 31 Mar 1993, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Ketter, James; Assistant Examiner: Yucel, Irem
LREP Lahive & Cockfield, LLP, DeConti, Jr., Giulio A., Kara, Catherine J.
CLMN Number of Claims: 51
ECL Exemplary Claim: 1
DRWN 14 Drawing Figure(s); 13 Drawing Page(s)
LN.CNT 6645
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 33 OF 35 USPATFULL
AB Yeast cells are engineered to express both a surrogate of a pheromone system protein (e.g., enzymes involved in maturation of .alpha.-factor, transporters of a-factor, pheromone receptors, etc.) and a potential peptide modulator of the surrogate, in such a manner that the inhibition or activation of the surrogate affects a screenable or selectable trait of the yeast cells. Various additional features improve the signal-to-noise ratio of the screening/selection system.
AN 1998:91815 USPATFULL
TI Yeast cells engineered to produce pheromone system protein surrogates, and uses therefor
IN Fowlkes, Dana M., Chapel Hill, NC, United States
Broach, Jim, Princeton, NJ, United States
Manfredi, John, Ossining, NY, United States
Klein, Christine, Ossining, NY, United States
Murphy, Andrew J., Montclair, NJ, United States
Paul, Jeremy, South Nyack, NY, United States
Trueheart, Joshua, South Nyack, NY, United States
PA Cadus Pharmaceutical Corporation, Tarrytown, NY, United States (U.S. corporation)
PI US 5789184 19980804
AI US 1995-464531 19950605 (8)
RLI Continuation-in-part of Ser. No. US 1994-322137, filed on 13 Oct 1994 which is a continuation-in-part of Ser. No. US 1994-309313, filed on 20 Sep 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-190328, filed on 31 Jan 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-41431, filed on 31 Mar 1993, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Ketter, James; Assistant Examiner: Yucel, Irem
LREP Lahive & Cockfield, LLP, DeConti, Jr., Giulio A., Kara, Catherine J.
CLMN Number of Claims: 48
ECL Exemplary Claim: 1

DRWN 14 Drawing Figure(s); 13 Drawing Page(s)
LN.CNT 6731
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 34 OF 35 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AB **Pertussis toxin** from *Bordetella pertussis* is one of the ADP-ribosylating toxins which are the cytotoxic agents of several infectious diseases. Transition state analogues of these enzymes are expected to be potent **inhibitors** and may be useful in therapy. **Pertussis toxin** catalyzes the ADP-ribosylation of a **cysteine** in the synthetic peptide alpha-i3C20, corresponding to the C-terminal 20 amino acids of the alpha-subunits of the G-protein G-i3. A family of kinetic isotope effects was determined for the ADP-ribosylation reaction, using 3H-, 14C- and 15N-labeled NAD+ as substrates. Primary kinetic isotope effects were 1.050 +/- 0.006 for (1'N-14C) and 1.021 +/- 0.002 for (1-N-15N), the double primary effect of (1'N-14C,1-N-15-N) was 1.064 +/- 0.002. Secondary kinetic isotope effects were 1.208 +/- 0.014 for (1'N-3H), 1.104 +/- 0.010 for (2'N-3H), 0.989 +/- 0.001 for (4'N-3H), and 1.014 +/- 0.002 for (5'N-3H). Isotope trapping experiments yielded a commitment factor of 0.01, demonstrating that the observed isotope effects are near intrinsic. Solvent D-2O kinetic isotope effects are inverse, consistent with deprotonation of the attacking Cys prior to transition state formation. The transition state structure was determined by a normal mode bond vibrational analysis. The transition state is characterized by a nicotinamide leaving group bond order of 0.14, corresponding to a bond length of 2.06 ANG . The incoming thiolate nucleophile has a bond order of 0.11, corresponding to 2.47 ANG . The ribose ring has strong oxocarbenium ion character. **Pertussis toxin** also catalyzes the slow hydrolysis of NAD+ in the absence of peptides. Comparison of the transition states for NAD+ hydrolysis and for ADP-ribosylation of peptide alpha-13C20 indicates that the sulfur nucleophile from the peptide Cys participates more actively as a nucleophile in the reaction than does water in the hydrolytic reaction. Participation of the thiolate anion at the transition state provides partial neutralization of the cationic charge which normally develops at the transition states of N-ribohydrolases and transferases. Thus, the presence of the peptide provides increased S-N2 character in a loose transition state which retains oxocarbenium character in the ribose.

AN 1997:357365 BIOSIS

DN PREV199799663768

TI **Pertussis toxin**: Transition state analysis of ADP-ribosylation of G-protein peptide alpha-i3C20.

AU Scheuring, Johannes; Schramm, Vern L. (1)

CS (1) Dep. Biochem., Albert Einstein Coll. Med., 1300 Morris Park Avenue, Bronx, NY 10461 USA

SO Biochemistry, (1997) Vol. 36, No. 27, pp. 8215-8223.
ISSN: 0006-2960.

DT Article

LA English

L13 ANSWER 35 OF 35 USPATFULL

AB A cagB gene of *H. pylori* is provided. This nucleic acid can be the nucleic acid consisting of nucleotides 193 through 1158 in the sequence set forth as SEQ ID NO:1, which is an example of a native coding sequence for CagB. This nucleic acid can also be in a vector suitable for expressing a polypeptide encoded by the nucleic acid. A cagC gene of *H. pylori* is provided. This nucleic acid can be the isolated nucleic acid consisting of nucleotides 1170 through 3830 in the sequence set forth as SEQ ID NO:3, which is an example of a native coding sequence for CagC. This nucleic acid can also be in a vector suitable for expressing a polypeptide encoded by the nucleic acid. Isolated nucleic acids that specifically hybridize with cagB and cagC are provided. CagB and CagC are associated with peptic ulceration and other clinical

syndromes in humans infected with strains of H. pylori that express it.
AN 96:53195 USPATFULL
TI CagB and CagC genes of helicobacter pylori and related compositions
IN Blaser, Martin J., Nashville, TN, United States
Tummuru, Murali K. R., Nashville, TN, United States
Sharma, Smita A., Nashville, TN, United States
PA Vanderbilt University, Nashville, TN, United States (U.S. corporation)
PI US 5527678 19960618
AI US 1994-327494 19941021 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Rees, Dianne
LREP Needle & Rosenberg
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN 2 Drawing Figure(s); 2 Drawing Page(s)
LN.CNT 1854
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

(FILE 'HOME' ENTERED AT 14:09:08 ON 03 DEC 2002)

FILE 'BIOSIS, CABA, CAPLUS, EMBASE, LIFESCI, MEDLINE, SCISEARCH,
USPATFULL, JAPIO' ENTERED AT 14:09:29 ON 03 DEC 2002

L1 22750 S BORDETELLA PERTUSSIS
L2 4 S CYSTEINE DESULFINASE
L3 3 S L1 AND L2

FILE 'STNGUIDE' ENTERED AT 14:15:05 ON 03 DEC 2002

L4 0 S PTA3254
L5 0 S L1 AND MUTANT?
L6 0 S L1 AND KNOCKOUT
L7 0 S BLAKE, MILAN/AU

FILE 'BIOSIS, CABA, CAPLUS, EMBASE, LIFESCI, MEDLINE, SCISEARCH,
USPATFULL, JAPIO' ENTERED AT 14:17:21 ON 03 DEC 2002

L8 2149 S L1 AND MUTANT
L9 45 S L8 AND KNOCKOUT
L10 31 DUP REM L9 (14 DUPLICATES REMOVED)
L11 2 S L10 AND L2

L10 ANSWER 1 OF 31 CAPLUS COPYRIGHT 2002 ACS

AB The invention provides the sequences for 2489 proteins and their genes from Streptococcus pneumoniae type 4 strain JNR.7/87, together with the genome sequence comprising 2,162,598 bases in length. Gene **knockout mutants** indicate several essential genes which may be of value as preferred antibiotic targets. These proteins and genes are useful for the development of vaccines, diagnostics, and antibiotics.

AN 2002:754418 CAPLUS

DN 137:289983

TI Complete genome of Streptococcus pneumoniae and its proteins and nucleic acids and their uses for diagnosis infection and antibiotic targets

IN Masignani, Vega; Tettelin, Herve; Fraser, Claire

PA Chiron Spa, Italy; The Institute for Genomic Research

SO PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002077021	A2	20021003	WO 2002-IB2163	20020327
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRAI	GB 2001-7658	A	20010327		

L10 ANSWER 2 OF 31 USPATFULL

AB The present invention comprises compositions and methods for treating a tumor or neoplastic disease in a host, The methods employ conjugates comprising superantigen polypeptides, nucleic acids with other structures that preferentially bind to tumor cells and are capable of inducing apoptosis. Also provided are superantigen-glycolipid conjugates and vesicles that are loaded onto antigen presenting cells to activate both T cells and NKT cells. Cell-based vaccines comprise tumor cells engineered to express a superantigen along with glycolipids products which, when expressed, render the cells capable of eliciting an effective anti-tumor immune response in a mammal into which these cells are introduced. Included among these compositions are tumor cells, hybrid cells of tumor cells and accessory cells, preferably dendritic cells. Also provided are tumoricidal T cells and NKT cells devoid of inhibitory receptors or inhibitory signaling motifs which are hyperresponsive to the the above compositions and lipid-based tumor associated antigens that can be administered for adoptive immunotherapy of cancer and infectious diseases.

AN 2002:315069 USPATFULL

TI Compositions and methods for treatment of neoplastic disease

IN Terman, David S., Pebble Beach, CA, UNITED STATES

PI US 2002177551 A1 20021128

AI US 2001-870759 A1 20010530 (9)

PRAI US 2000-208128P 20000531 (60)

DT Utility

FS APPLICATION

LREP David S. Terman, P.O. Box 987, Pebble Beach, CA, 93953

CLMN Number of Claims: 30

ECL Exemplary Claim: 1

DRWN 3 Drawing Page(s)

LN.CNT 17323

L10 ANSWER 3 OF 31 USPATFULL

AB The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

AN 2002:301167 USPATFULL

TI Nucleic acids, proteins, and antibodies

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

Barash, Steven C., Rockville, MD, UNITED STATES

PI US 2002168711 A1 20021114

AI US 2001-764868 A1 20010117 (9)

PRAI US 2000-179065P 20000131 (60)

US 2000-180628P 20000204 (60)

US 2000-214886P 20000628 (60)

US 2000-217487P 20000711 (60)

US 2000-225758P 20000814 (60)

US 2000-220963P 20000726 (60)

US 2000-217496P 20000711 (60)

US 2000-225447P 20000814 (60)

US 2000-218290P 20000714 (60)

US 2000-225757P 20000814 (60)

US 2000-226868P 20000822 (60)

US 2000-216647P 20000707 (60)

US 2000-225267P 20000814 (60)

US 2000-216880P 20000707 (60)

US 2000-225270P 20000814 (60)

US 2000-251869P 20001208 (60)

US 2000-235834P 20000927 (60)

US 2000-234274P 20000921 (60)

US 2000-234223P 20000921 (60)

US 2000-228924P 20000830 (60)

US 2000-224518P 20000814 (60)

US 2000-236369P 20000929 (60)

US 2000-224519P 20000814 (60)

US 2000-220964P 20000726 (60)

US 2000-241809P 20001020 (60)

US 2000-249299P 20001117 (60)

US 2000-236327P 20000929 (60)

US 2000-241785P 20001020 (60)

US 2000-244617P 20001101 (60)

US 2000-225268P 20000814 (60)

US 2000-236368P 20000929 (60)

US 2000-251856P 20001208 (60)

US 2000-251868P 20001208 (60)

US 2000-229344P 20000901 (60)

US 2000-234997P 20000925 (60)

US 2000-229343P 20000901 (60)

US 2000-229345P 20000901 (60)

US 2000-229287P 20000901 (60)

US 2000-229513P 20000905 (60)

US 2000-231413P 20000908 (60)

US 2000-229509P 20000905 (60)

US 2000-236367P 20000929 (60)

US 2000-237039P 20001002 (60)
US 2000-237038P 20001002 (60)
US 2000-236370P 20000929 (60)
US 2000-236802P 20001002 (60)
US 2000-237037P 20001002 (60)
US 2000-237040P 20001002 (60)
US 2000-240960P 20001020 (60)
US 2000-239935P 20001013 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 31967

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 4 OF 31 USPATFULL

AB Fluorescent indicators including a binding protein moiety, a donor fluorescent protein moiety, and an acceptor fluorescent protein moiety are described. The binding protein moiety has an analyte-binding region which binds an analyte and causes the indicator to change conformation upon exposure to the analyte. The donor moiety and the acceptor moiety change position relative to each other when the analyte binds to the analyte-binding region. The donor moiety and the acceptor moiety exhibit fluorescence resonance energy transfer when the donor moiety is excited and the distance between the donor moiety and the acceptor moiety is small. The indicators can be used to measure analyte concentrations in samples, such as calcium ion concentrations in cells.

AN 2002:295314 USPATFULL

TI Fluorescent protein sensors for detection of analytes

IN Tsien, Roger Y., La Jolla, CA, UNITED STATES

Miyawaki, Atsushi, San Diego, CA, UNITED STATES

PI US 2002165364 A1 20021107

AI US 2000-554000 A1 20000420 (9)

RLI Continuation of Ser. No. US 1997-818252, filed on 14 Mar 1997, GRANTED, Pat. No. US 6197928

DT Utility

FS APPLICATION

LREP LISA A. HAILE, J.D., PH.D., GRAY CARY WARE & FREIDENRICH LLP, 4365 EXECUTIVE DRIVE, SUITE 1100, SAN DIEGO, CA, 92121-2133

CLMN Number of Claims: 37

ECL Exemplary Claim: 1

DRWN 17 Drawing Page(s)

LN.CNT 2677

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 5 OF 31 USPATFULL

AB Methods and compositions are provided for the enhanced production of bacterial toxins in large-scale cultures. Specifically, methods and compositions for reducing bacterial toxin expression inhibitors are providing including, but not limited to, addition of toxin expression inhibitor binding compounds, culture media having reduced concentrations of toxin inhibitor metabolic precursors and genetically modified toxogenic bacteria lacking enzymes required to metabolize the toxin inhibitor metabolic precursors.

AN 2002:295294 USPATFULL

TI Method for the production of bacterial toxins

IN Blake, Milan S., Fulton, MD, UNITED STATES

Bogdan, John A., JR., Westminster, MD, UNITED STATES

Nazario-Larrieu, Javier, Rio Piedras, PR, UNITED STATES

PI US 2002165344 A1 20021107

AI US 2001-825769 A1 20010404 (9)

PRAI US 2000-194478P 20000404 (60)

DT Utility
FS APPLICATION
LREP Baxter Healthcare Corporation, P.O. Box 15210, Irvine, CA, 92614
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN 13 Drawing Page(s)
LN.CNT 956
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 6 OF 31 USPATFULL

AB Polynucleotides encoding fluorescent indicators, which contain a sensor polypeptide inserted within a fluorescent moiety, are provided, as are polypeptides encoded by such polynucleotides. Also provided are circularly permuted fluorescent polypeptides and polynucleotides encoding the circularly permuted fluorescent polypeptides. In addition, methods of using the fluorescent indicators and the circularly permuted fluorescent polypeptides are provided.

AN 2002:281665 USPATFULL
TI Circularly permuted fluorescent protein indicators
IN Tsien, Roger Y., La Jolla, CA, UNITED STATES
Baird, Geoffrey, San Diego, CA, UNITED STATES
PI US 2002157120 A1 20021024
AI US 2001-999745 A1 20011023 (9)
RLI Continuation-in-part of Ser. No. US 1999-316920, filed on 21 May 1999, PENDING
PRAI WO 2000-US13684 20000517
DT Utility
FS APPLICATION
LREP GARY CARY WARE & FRIENDENRICH LLP, 4365 EXECUTIVE DRIVE, SUITE 1600, SAN DIEGO, CA, 92121-2189
CLMN Number of Claims: 41
ECL Exemplary Claim: 1
DRWN 14 Drawing Page(s)
LN.CNT 3477
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 7 OF 31 USPATFULL

AB The present invention relates to a histidine kinase, two-component gene. (CaHK1) from Candida albicans. CaHK1 encodes a 2471 amino acid protein with an estimated molecular mass of 281.8 kDa. Also provided are vectors, host cells, antibodies and recombinant methods for producing the same. The invention further relates agonists and antagonists and to screening methods for identifying agonists and antagonists of CaHK1 polypeptide activity. The invention additionally relates to diagnostic methods for detecting CaHK1 nucleic acids, polypeptides, and antibodies in a biological sample. The present invention further relates to novel antagonists and vaccines for the prevention or attenuation of infection by Candida albicans.

AN 2002:265862 USPATFULL
TI Histidine kinase two-component in candida albicans
IN Abad, Antonio Jose C., Washington, DC, UNITED STATES
Choi, Gil H., Rockville, MD, UNITED STATES
Calderone, Richard A., Washington, DC, UNITED STATES
PA Human Genome Sciences, Inc., Rockville, MD (U.S. corporation)
PI US 2002146738 A1 20021010
AI US 2002-116048 A1 20020405 (10)
RLI Division of Ser. No. US 1999-419291, filed on 15 Oct 1999, PENDING
Division of Ser. No. US 1998-112450, filed on 9 Jul 1998, GRANTED, Pat. No. US 6120999
PRAI US 1998-74308P 19980211 (60)
US 1997-52273P 19970710 (60)
DT Utility
FS APPLICATION
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 21 Drawing Page(s)
LN.CNT 3802
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 8 OF 31 USPATFULL

AB The present invention provides a polypeptide, called EspA, which is secreted by pathogenic E. coli, such as the enteropathogenic (EPEC) and enterohemorrhagic (EHEC) E. coli. The invention also provides isolated nucleic acid sequences encoding EspA polypeptide, EspA peptides, a recombinant method for producing recombinant EspA, antibodies which bind to EspA, and a kit for the detection of EspA-producing E. coli.

AN 2002:214437 USPATFULL
TI Pathogenic escherichia coli associated protein
IN Finlay, B. Brett, Richmond, CANADA
Kenny, Brendan, Bristol, UNITED KINGDOM
Stein, Markus, Quercegrossa, ITALY
Donnenberg, Michael S., Baltimore, MD, UNITED STATES
Lai, Li-Ching, Upper Arlington, OH, UNITED STATES

PI US 2002115829 A1 20020822
AI US 2001-967347 A1 20010928 (9)
RLI Division of Ser. No. US 1999-171517, filed on 10 Aug 1999, PATENTED A 371 of International Ser. No. WO 1997-CA265, filed on 23 Apr 1997, UNKNOWN

PRAI US 1996-15999P 19960423 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092

CLMN Number of Claims: 39
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 2259
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 9 OF 31 USPATFULL

AB A novel costimulatory protein molecule, B7-DC, which is a member of the B7 family, is described as is DNA coding therefor and expression vectors comprising this DNA. B7-DC protein, fragments, fusion polypeptides/proteins and other functional derivatives, and transformed cells expressing B7-DC are useful in vaccine compositions and methods. Compositions and methods are disclosed for inducing potent T cell mediated responses that can be harnessed for anti-tumor and anti-viral immunity.

AN 2002:172486 USPATFULL
TI Dendritic cell co-stimulatory molecules
IN Pardoll, Drew M., Brookville, MD, UNITED STATES
Tsuchiya, Haruo, Baltimore, MD, UNITED STATES
Gorski, Kevin S., Baltimore, MD, UNITED STATES
Tseng, Su-Yi, Baltimore, MD, UNITED STATES

PI US 2002091246 A1 20020711
AI US 2001-794210 A1 20010228 (9)
PRAI US 2000-200580P 20000428 (60)
US 2000-240169P 20001013 (60)

DT Utility
FS APPLICATION
LREP VENABLE, Post Office Box 34385, Washington, DC, 20043-9998

CLMN Number of Claims: 120
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 3534
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 10 OF 31 USPATFULL

AB The sequences of antisense nucleic acids which inhibit the proliferation of prokaryotes are disclosed. Cell-based assays which employ the antisense nucleic acids to identify and develop antibiotics are also disclosed. The antisense nucleic acids can also be used to identify proteins required for proliferation, express these proteins or portions thereof, obtain antibodies capable of specifically binding to the expressed proteins, and to use those expressed proteins as a screen to isolate candidate molecules for rational drug discovery programs. The nucleic acids can also be used to screen for homologous nucleic acids that are required for proliferation in cells other than *Staphylococcus aureus*, *Salmonella typhimurium*, *Klebsiella pneumoniae*, and *Pseudomonas aeruginosa*. The nucleic acids of the present invention can also be used in various assay systems to screen for proliferation required genes in other organisms.

AN 2002:119586 USPATFULL

TI Identification of essential genes in prokaryotes

IN Haselbeck, Robert, San Diego, CA, UNITED STATES

Ohlsen, Kari L., San Diego, CA, UNITED STATES

Zyskind, Judith W., La Jolla, CA, UNITED STATES

Wall, Daniel, San Diego, CA, UNITED STATES

Trawick, John D., La Mesa, CA, UNITED STATES

Carr, Grant J., Escondido, CA, UNITED STATES

Yamamoto, Robert T., San Diego, CA, UNITED STATES

Xu, H. Howard, San Diego, CA, UNITED STATES

PI US 2002061569 A1 20020523

AI US 2001-815242 A1 20010321 (9)

PRAI US 2000-191078P 20000321 (60)

US 2000-206848P 20000523 (60)

US 2000-207727P 20000526 (60)

US 2000-242578P 20001023 (60)

US 2000-253625P 20001127 (60)

US 2000-257931P 20001222 (60)

US 2001-269308P 20010216 (60)

DT Utility

FS APPLICATION

LREP KNOBBE MARTENS OLSON & BEAR LLP, 620 NEWPORT CENTER DRIVE, SIXTEENTH FLOOR, NEWPORT BEACH, CA, 92660

CLMN Number of Claims: 44

ECL Exemplary Claim: 1

DRWN 4 Drawing Page(s)

LN.CNT 30870

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 11 OF 31 USPATFULL

AB Methods and compositions are provided for the enhanced production of bacterial toxins in large-scale cultures. Specifically, methods and compositions for reducing bacterial toxin expression inhibitors are providing including, but not limited to, addition of toxin expression inhibitor binding compounds, culture media having reduced concentrations of toxin inhibitor metabolic precursors and genetically modified toxogenic bacteria lacking enzymes required to metabolize the toxin inhibitor metabolic precursors.

AN 2002:119572 USPATFULL

TI Method for the production of bacterial toxins

IN Blake, Milan S., Fulton, MD, UNITED STATES

Bogdan, John A., JR., Westminster, MD, UNITED STATES

Nazario-Larrieu, Javier, Rio Piedras, PR, UNITED STATES

PI US 2002061555 A1 20020523

AI US 2001-825770 A1 20010404 (9)

PRAI US 2000-194482P 20000404 (60)

DT Utility

FS APPLICATION

LREP Baxter Healthcare Corporation, P.O. Box 15210, Irvine, CA, 92614

CLMN Number of Claims: 28

ECL Exemplary Claim: 1

DRWN 13 Drawing Page(s)

LN.CNT 1015

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 12 OF 31 USPATFULL

AB A plant-based edible vaccine against autoimmune disease prepared by expressing a CTB-autoantigen chimeric gene construct in plant cells and transgenic plants is disclosed. DNA constructs, expression vectors comprising a nucleotide sequence that encodes a CTB-autoantigen chimeric gene, which are optimized for expression in plants, are described.

AN 2002:106407 USPATFULL

TI METHODS AND SUBSTANCES FOR PREVENTING AND TREATING AUTOIMMUNE DISEASE

IN LANGRIDGE, WILLIAM H.R., LOMA LINDA, CA, UNITED STATES

ARAKAWA, TAKESHI, OKINAWA, JAPAN

PI US 2002055618 A1 20020509

AI US 1999-296981 A1 19990422 (9)

PRAI US 1998-82688P 19980422 (60)

DT Utility

FS APPLICATION

LREP Sheldon & Mak, 225 South Lake Avenue, Suite 900, Pasadena, CA, 91101

CLMN Number of Claims: 30

ECL Exemplary Claim: 1

DRWN 12 Drawing Page(s)

LN.CNT 2684

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 13 OF 31 USPATFULL

AB The invention provided herein describes ligands and methods for modulating a G protein-coupled receptor (GPCR), designated G2A, a lymphocyte expressed receptor whose genetic ablation results in the development of autoimmunity. The present disclosure teaches that lysophosphatidylcholine (LPC) is a high affinity ligand for G2A and that sphingosylphosphorylcholine (SPC) is a lower affinity ligand for G2A. As G2A activation is shown to be involved in a variety of physiological processes including cell proliferation, autoimmunity and inflammation, methods which modulate its activity have a variety of diagnostic and therapeutic applications.

AN 2002:99084 USPATFULL

TI Methods for modulating the activation of a lymphocyte expressed G protein coupled receptor involved in cell proliferation, autoimmunity and inflammation

IN Witte, Owen N., Sherman Oaks, CA, UNITED STATES

Weng, Zhigang, Brookline, MA, UNITED STATES

Le, Lu Q., Los Angeles, CA, UNITED STATES

Kabarowski, Janusz H.S., Los Angeles, CA, UNITED STATES

Xu, Yan, Pepper Pike, OH, UNITED STATES

Zhu, Kui, Richmond Heights, OH, UNITED STATES

PA The Regents of the University of California (U.S. corporation)

PI US 2002051980 A1 20020502

AI US 2001-796266 A1 20010228 (9)

RLI Continuation-in-part of Ser. No. US 2000-553875, filed on 20 Apr 2000, PENDING Continuation-in-part of Ser. No. US 1998-120025, filed on 17 Jul 1998, GRANTED, Pat. No. US 6214562 Continuation-in-part of Ser. No. US 1997-969815, filed on 13 Nov 1997, GRANTED, Pat. No. US 6207412

DT Utility

FS APPLICATION

LREP GATES & COOPER LLP, HOWARD HUGHES CENTER, 6701 CENTER DRIVE WEST, SUITE 1050, LOS ANGELES, CA, 90045

CLMN Number of Claims: 19

ECL Exemplary Claim: 1

DRWN 27 Drawing Page(s)

LN.CNT 2578

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 14 OF 31 USPATFULL

AB Disclosed herein is a method of delivering a bioactive compound to an organism that involves growing individual cells in vitro under conditions that allow the formation of an organized tissue, at least a subset of the cells containing a foreign DNA sequence which mediates the production of the bioactive compound; and implanting the organized tissue into the organism, whereby the bioactive compound is produced and delivered to the organism. Also disclosed herein is an in vitro method for producing a tissue having in vivo-like gross and cellular morphology that involves providing precursor cells of the tissue; mixing the cells with a solution of extracellular matrix components to create a suspension; placing the suspension in a vessel having a three dimensional geometry approximating the in vivo gross and cellular morphology of the tissue and having attachment surfaces coupled thereto; allowing the suspension to coalesce; and culturing the cells under conditions in which the cells form an organized tissue connected to the attachment surfaces. Also disclosed herein is an apparatus for producing in vitro a tissue having in vivo-like gross and cellular morphology. This apparatus includes a vessel having a three dimensional geometry approximating the in vivo morphology of the tissue and tissue attachment surfaces coupled thereto.

AN 2002:66628 USPATFULL

TI DELIVERY OF BIOACTIVE COMPOUNDS TO AN ORGANISM

IN VANDENBURGH, HERMAN H., PROVIDENCE, RI; UNITED STATES

PI US 2002037279 A1 20020328

AI US 1998-118950 A1 19980717 (9)

RLI Continuation-in-part of Ser. No. US 1997-896152, filed on 17 Jul 1997, PENDING Continuation-in-part of Ser. No. US 1996-712111, filed on 13 Sep 1996, GRANTED, Pat. No. US 5869041

DT Utility

FS APPLICATION

LREP NIXON PEABODY LLP, ATTENTION: DAVID RESNICK, 101 FEDERAL STREET, BOSTON, MA, 02110

CLMN Number of Claims: 15

ECL Exemplary Claim: 1

DRWN 25 Drawing Page(s)

LN.CNT 3958

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 15 OF 31 USPATFULL

AB The present invention provides polypeptide and polynucleotides encoding fluorescent indicators having inserted within a fluorescent moiety a sensor polypeptide. Also provided are methods of using the fluorescent indicator. Circularly permuted fluorescent polypeptides and polynucleotides are also provided.

AN 2002:276196 USPATFULL

TI Fluorescent protein indicators

IN Tsien, Roger Y., La Jolla, CA, United States

Baird, Geoffrey, Solana Beach, CA, United States

PA The Regents of the University of California, Oakland, CA, United States (U.S. corporation)

PI US 6469154 B1 20021022

AI US 1999-316919 19990521 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Mertz, Prema; Assistant Examiner: Murphy, Joseph F.

LREP Knobbe, Martens, Olson & Bear, LLP

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN 9 Drawing Figure(s); 8 Drawing Page(s)

LN.CNT 2582

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 16 OF 31 USPATFULL

AB The present invention relates to a histidine kinase, two-component gene (CaHK1) from *Candida albicans*. CaHK1 encodes a 2471 amino acid protein with an estimated molecular mass of 281.8 kDa. Also provided are vectors, host cells, antibodies and recombinant methods for producing the same. The invention further relates agonists and antagonists and to screening methods for identifying agonists and antagonists of CaHK1 polypeptide activity. The invention additionally relates to diagnostic methods for detecting CaHK1 nucleic acids, polypeptides, and antibodies in a biological sample. The present invention further relates to novel antagonists and vaccines for the prevention or attenuation of infection by *Candida albicans*.

AN 2002:168077 USPATFULL

TI Histidine kinase two-component in *Candida albicans*

IN Abad, Antonio Jose C., Washington, DC, United States

Choi, Gil H., Rockville, MD, United States

Calderone, Richard A., Washington, DC, United States

PA Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

The Georgetown University, Washington, DC, United States (U.S. corporation)

PI US 6416989 B1 20020709

AI US 1999-419291 19991015 (9)

RLI Division of Ser. No. US 1998-112450, filed on 9 Jul 1998, now patented, Pat. No. US 6120999, issued on 19 Sep 2000

PRAI US 1997-52273P 19970710 (60)

US 1998-74308P 19980211 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Prouty, Rebecca E.; Assistant Examiner: Steadman, David J.

LREP Human Genome Sciences, Inc.

CLMN Number of Claims: 25

ECL Exemplary Claim: 1

DRWN 21 Drawing Figure(s); 21 Drawing Page(s)

LN.CNT 3751

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 17 OF 31 USPATFULL

AB The present invention provides the EspA polypeptide, which is secreted by pathogenic *E coli*, such as the enteropathogenic (EPEC) and enterohemorrhagic (EHEC) *E coli*. Diagnosis of disease caused by such pathogenic *E coli* can be performed by standard techniques, such as those based upon the use of antibodies which bind to EspA to detect the protein, as well as those based on the use of nucleic acid probes for detection of nucleic acids encoding EspA protein. The invention also provides isolated nucleic acid sequences encoding EspA, EspA polypeptide, EspA peptides, a method for producing recombinant EspA, antibodies which bind to EspA, and a kit for the detection of EspA-producing *E coli*. The invention also provides a method of immunizing a host with EspA to induce a protective immune response to EspA.

AN 2002:50620 USPATFULL

TI Pathogenic *Escherichia coli* associated protein EspA

IN Finlay, B. Brett, Richmond, CANADA

Kenny, Brendan, Redland, UNITED KINGDOM

Stein, Markus, Quercegrossa, ITALY

Donnenberg, Michael S., Baltimore, MD, United States

Lai, Li-Ching, Upper Arlington, OH, United States

PA University of British Columbia, Vancouver, CANADA (non-U.S. corporation)

PI US 6355254 B1 20020312

WO 9740063 19971030

AI US 1999-171517 19990810 (9)

WO 1997-CA265 19970423
19990810 PCT 371 date

PRAI US 1996-15999P 19960423 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Graser, Jennifer E.
LREP SEED Intellectual Property Law Group PLLC
CLMN Number of Claims: 5
ECL Exemplary Claim: 1
DRWN 11 Drawing Figure(s); 8 Drawing Page(s)
LN.CNT 2147
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 18 OF 31 USPATFULL

AB Fluorescent indicators including a binding protein moiety, a donor fluorescent protein moiety, and an acceptor fluorescent protein moiety are described. The binding protein moiety has an analyte-binding region which binds an analyte and causes the indicator to change conformation upon exposure to the analyte. The donor moiety and the acceptor moiety change position relative to each other when the analyte binds to the analyte-binding region. The donor moiety and the acceptor moiety exhibit fluorescence resonance energy transfer when the donor moiety is excited and the distance between the donor moiety and the acceptor moiety is small. The indicators can be used to measure analyte concentrations in samples, such as calcium ion concentrations in cells.

AN 2001:33424 USPATFULL

TI Fluorescent protein sensors for detection of analytes

IN Tsien, Roger Y., La Jolla, CA, United States

Miyawaki, Atsushi, San Diego, CA, United States

PA The Regents of the University of California, Oakland, CA, United States (U.S. corporation)

PI US 6197928 B1 20010306

AI US 1997-818252 19970314 (8)

DT Utility

FS Granted

EXNAM Primary Examiner: Scheiner, Laurie; Assistant Examiner: Parkin, Jeffrey S.

LREP Gray, Cary, Ware & Friedenrich LLP, Haile, Lisa A.

CLMN Number of Claims: 37

ECL Exemplary Claim: 1

DRWN 10 Drawing Figure(s); 18 Drawing Page(s)

LN.CNT 1803

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 19 OF 31 USPATFULL

AB The present invention relates to a histidine kinase, two-component gene (CaHK1) from *Candida albicans*. CaHK1 encodes a 2471 amino acid protein with an estimated molecular mass of 281.8 kDa. Also provided are vectors, host cells, antibodies and recombinant methods for producing the same. The invention further relates agonists and antagonists and to screening methods for identifying agonists and antagonists of CaHK1 polypeptide activity. The invention additionally relates to diagnostic methods for detecting CaHK1 nucleic acids, polypeptides, and antibodies in a biological sample. The present invention further relates to novel antagonists and vaccines for the prevention or attenuation of infection by *Candida albicans*.

AN 2000:124777 USPATFULL

TI Histidine kinase two-component in *Candida albicans*

IN Abad, Antonio Jose C., Washington, DC, United States

Choi, Gil H., Rockville, MD, United States

Calderone, Richard A., Washington, DC, United States

PA Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

The Georgetown University, Washington, DC, United States (U.S.)

corporation)
PI US 6120999 20000919
AI US 1998-112450 19980709 (9)
PRAI US 1997-52273P 19970710 (60)
US 1998-74308P 19980211 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Myers, Carla J.; Assistant Examiner: Johannsen, Diana
LREP Hoover, Kenley K.
CLMN Number of Claims: 20
ECL Exemplary Claim: 5
DRWN 5 Drawing Figure(s); 21 Drawing Page(s)
LN.CNT 3683
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 20 OF 31 USPATFULL

AB Disclosed are compositions and methods of use that comprise engineered IgA antibodies that, when administered to a host are secreted across the epithelium into the mucosal barriers of the body providing external passive immunotherapy against agents such as viral, bacterial and eukaryotic pathogens. Also disclosed are mini antibodies comprising the minimal transcytosis domains.
AN 2000:61721 USPATFULL
TI Recombinant human IGA-J. chain dimer
IN Capra, J. Donald, Dallas, TX, United States
Hexham, Jonathan M., Dallas, TX, United States
Carayannopoulos, Leon N., St Louis, MO, United States
Max, Edward E., Bethesda, MD, United States
PA Board of Regents, The University of Texas System, Austin, TX, United States (U.S. corporation)
The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)
PI US 6063905 20000516
AI US 1997-779597 19970107 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Eyler, Yvonne
LREP Arnold, White & Durkee
CLMN Number of Claims: 102
ECL Exemplary Claim: 1
DRWN 7 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 2003
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 21 OF 31 USPATFULL

AB Novel bacterial preparations containing one or more isolated and purified strain of a microorganism which produces one or more RTX toxins, and which strain has at least one RTX toxin which is substantially cell-associated. Methods of preparing the bacterial preparations and their use as vaccines and to produce antibodies for passive immunization are described.
AN 2000:12447 USPATFULL
TI Bacterial preparations, method for producing same, and their use as vaccines
IN MacInnes, Janet, Guelph, Canada
Ricciatti, Paul, Guelph, Canada
Mallard, Bonnie, Ariss, Canada
Rosendal, deceased, Soren, late of Guelph, Canada by Lillian Rosendal, legal representative
PA University of Guelph, Guelph, Canada (non-U.S. corporation)
PI US 6019984 20000201
AI US 1996-772270 19961223 (8)
RLI Continuation-in-part of Ser. No. US 1995-396244, filed on 1 Mar 1995, now abandoned

DT Utility
FS Granted
EXNAM Primary Examiner: Minnifield, Nita
LREP Bereskin & Parr
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 45 Drawing Figure(s); 45 Drawing Page(s)
LN.CNT 4008
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 22 OF 31 MEDLINE

AB We have examined the roles of enzyme activity and the nontoxic AB complex of heat-labile toxin (LT) from *Escherichia coli* on its adjuvant and immunomodulatory properties. LTK63, an LT mutant that is completely devoid of enzyme activity, enhanced Th1 responses to coinjected Ags at low adjuvant dose. In contrast, LTR72, a partially detoxified mutant, enhanced Th2 responses and when administered intranasally to mice before infection with *Bordetella pertussis* suppressed Th1 responses and delayed bacterial clearance from the lungs. LTR72 or wild-type LT inhibited Ag-induced IFN-gamma production by Th1 cells, and LT enhanced IL-5 production by Th2 cells in vitro. Each of the toxins enhanced B7-1 expression on macrophages, but enhancement of B7-2 expression was dependent on enzyme activity. We also observed distinct effects of the nontoxic AB complex and enzyme activity on inflammatory cytokine production. LT and LTR72 suppressed LPS and IFN-gamma induced TNF-alpha and IL-12 production, but enhanced IL-10 secretion by macrophages in vitro and suppressed IL-12 production in vivo in a murine model of LPS-induced shock. In contrast, LTK63 augmented the production of IL-12 and TNF-alpha. Furthermore, LTK63 enhanced NF-kappaB translocation, whereas low doses of LTR72 or LT failed to activate NF-kappaB, but stimulated cAMP production. Thus, *E. coli* LT appears to be capable of suppressing Th1 responses and enhancing Th2 responses through the modulatory effects of enzyme activity on NF-kappaB activation and IL-12 production. In contrast, the nontoxic AB complex can stimulate acquired immune responses by activating components of the innate immune system.

AN 2001059616 MEDLINE

DN 20521753 PubMed ID: 11067933

TI Modulation of innate and acquired immune responses by *Escherichia coli* heat-labile toxin: distinct pro- and anti-inflammatory effects of the nontoxic AB complex and the enzyme activity.

AU Ryan E J; McNeela E; Pizza M; Rappuoli R; O'Neill L; Mills K H

CS Infection and Immunity Group, Institute for Immunology, National University of Ireland, Maynooth, Ireland.

SO JOURNAL OF IMMUNOLOGY, (2000 Nov 15) 165 (10) 5750-9.

Journal code: 2985117R. ISSN: 0022-1767.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Abridged Index Medicus Journals; Priority Journals

EM 200012

ED Entered STN: 20010322

Last Updated on STN: 20010322

Entered Medline: 20001222

L10 ANSWER 23 OF 31 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1

AB WbpM is a highly conserved protein involved in synthesis of the O antigens of *Pseudomonas aeruginosa*. Homologues of this protein have been identified in a large number of bacteria, and they can be divided into two subfamilies: subfamily 1, including WbpM, contains large proteins (apprx600 amino acids), while subfamily 2, typified by HP0840 (FlaA1) of *Helicobacter pylori*, contains smaller proteins (apprx350 amino acids) homologous to the C termini of proteins in subfamily 1. Analysis of knockout mutants of wbpM in *P. aeruginosa* serotypes O3,

O10, O15, and O17 showed that although all 20 serotypes of *P. aeruginosa* possess wbpM, it is not universally required for O-antigen biosynthesis. Homologous genes from *Bordetella pertussis* (wblL), *Staphylococcus aureus* (cap8D), and *H. pylori* (flaA1) complemented a *P. aeruginosa* O5 wbpM mutant to various degrees. These conserved proteins may represent interesting targets for the design of inhibitors of bacterial exopolysaccharide biosynthesis.

AN 2000:104130 BIOSIS
DN PREV200000104130
TI Functional conservation of the polysaccharide biosynthetic protein WbpM and its homologues in *Pseudomonas aeruginosa* and other medically significant bacteria.
AU Burrows, Lori L.; Urbanic, Robert V.; Lam, Joseph S. (1)
CS (1) Department of Microbiology, University of Guelph, Guelph, Ontario, N1G 2W1 Canada
SO Infection and Immunity, (Feb., 2000) Vol. 68, No. 2, pp. 931-936. ISSN: 0019-9567.
DT Article
LA English
SL English

L10 ANSWER 24 OF 31 USPATFULL

AB Fluorescent indicators including a binding protein moiety, a donor fluorescent protein moiety, and an acceptor fluorescent protein moiety are described. The binding protein moiety has an analyte-binding region which binds an analyte and causes the indicator to change conformation upon exposure to the analyte. The donor moiety and the acceptor moiety change position relative to each other when the analyte binds to the analyte-binding region. The donor moiety and the acceptor moiety exhibit fluorescence resonance energy transfer when the donor moiety is excited and the distance between the donor moiety and the acceptor moiety is small. The indicators can be used to measure analyte concentrations in samples, such as calcium ion concentrations in cells.

AN 1999:159820 USPATFULL
TI Fluorescent protein sensors for detection of analytes
IN Tsien, Roger Y., La Jolla, CA, United States
Miyawaki, Atsushi, San Diego, CA, United States
PA The Regents of the University of California, Oakland, CA, United States (U.S. corporation)
PI US 5998204 19991207
AI US 1997-818253 19970314 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Brusca, John S.
LREP Gray Cary Ware & Friedenrich LLP, Haile, Lisa A.
CLMN Number of Claims: 21
ECL Exemplary Claim: 16
DRWN 17 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 2939
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 25 OF 31 USPATFULL

AB Novel nucleic acid molecules encoding proteins involved in the synthesis and assembly of O-antigen in *P. aeruginosa*; and novel proteins encoded by the nucleic acid molecules are described. Methods are disclosed for detecting *P. aeruginosa* in a sample by determining the presence of the proteins or a nucleic acid molecule encoding the proteins in the sample.

AN 1999:155456 USPATFULL
TI Proteins involved in the synthesis and assembly of O-antigen in *Pseudomonas aeruginosa*
IN Lam, Joseph S., Guelph, Canada
Burrows, Lori, Guelph, Canada
Charter, Deborah, Guelph, Canada
de Kievit, Teresa, Guelph, Canada

PA University of Guelph, Guelph, Canada (non-U.S. corporation)
 PI US 5994072 19991130
 AI US 1997-846762 19970430 (8)
 PRAI US 1996-16510P 19960430 (60)
 US 1997-39473P 19970227 (60)
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Degen, Nancy; Assistant Examiner: Schwartzman, Robert
 LREP Merchant & Gould P.C.
 CLMN Number of Claims: 14
 ECL Exemplary Claim: 1
 DRWN 66 Drawing Figure(s); 63 Drawing Page(s).
 LN.CNT 7459
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2
 AB A review with 109 refs. Inorg. polyphosphate (poly P) is a chain of tens or many hundreds of phosphate (Pi) residues linked by high-energy phosphoanhydride bonds. Despite inorg. polyphosphate's ubiquity-found in every cell in nature and likely conserved from prebiotic times-this polymer has been given scant attention. Among the reasons for this neglect of poly P have been the lack of sensitive, definitive, and facile anal. methods to assess its concn. in biol. sources and the consequent lack of demonstrably important physiol. functions. This review focuses on recent advances made possible by the introduction of novel, enzymically based assays. The isolation and ready availability of *Escherichia coli* polyphosphate kinase (PPK) that can convert poly P and ADP to ATP and of a yeast exopolyphosphatase that can hydrolyze poly P to Pi, provide highly specific, sensitive, and facile assays adaptable to a high-throughput format. Beyond the reagents afforded by the use of these enzymes, their genes, when identified, mutated, and overexpressed, have offered insights into the physiol. functions of poly P. Most notably, studies in *E. coli* reveal large accumulations of poly P in cellular responses to deficiencies in an amino acid, Pi, or nitrogen or to the stresses of a nutrient downshift or high salt. The **ppk mutant**, lacking PPK and thus severely deficient in poly P, also fails to express RpoS (a sigma factor for RNA polymerase), the regulatory protein that governs .gtoreq.50 genes responsible for stationary-phase adaptations to resist starvation, heat and oxidant stresses, UV irradiation, etc. Most dramatically, **ppk mutants** die after only a few days in stationary phase. The high degree of homol. of the PPK sequence in many bacteria, including some of the major pathogenic species (e.g. *Mycobacterium tuberculosis*, *Neisseria meningitidis*, *Helicobacter pylori*, *Vibrio cholerae*, *Salmonella typhimurium*, *Shigella flexneri*, *Pseudomonas aeruginosa*, **Bordetella pertussis**, and *Yersinia pestis*), has prompted the **knockout** of their PPK gene to det. the dependence of virulence on poly P and the potential of PPK as a target for antimicrobial drugs. In yeast and mammalian cells, exo- and endopolyphosphatases have been identified and isolated, but little is known about the synthesis of poly P or its physiol. functions. Whether microbe or human, all species depend on adaptations in the stationary phase, which is truly a dynamic phase of life. Most research is focused on the early and reproductive phases of organisms, which are rather brief intervals of rapid growth. More attention needs to be given to the extensive period of maturity. Survival of microbial species depends on being able to manage in the stationary phase. In view of the universality and complexity of basic biochem. mechanisms, it would be surprising if some of the variety of poly P functions obsd. in microorganisms did not apply to aspects of human growth and development, to aging, and to the aberrations of disease. Of theor. interest regarding poly P is its antiquity in prebiotic evolution, which along with its high energy and phosphate content, make it a plausible precursor to RNA, DNA, and proteins. Practical interest in poly P includes many industrial applications, among which is the microbial removal of Pi in aquatic environments.

AN 1999:592015 CAPLUS
 DN 131:307932
 TI Inorganic polyphosphate: a molecule of many functions
 AU Kornberg, Arthur; Rao, Narayana N.; Ault-Riche, Dana
 CS Department of Biochemistry, Stanford University School of Medicine,
 Stanford, CA, 94305-5307, USA
 SO Annual Review of Biochemistry (1999), 68, 89-125
 CODEN: ARBOAW; ISSN: 0066-4154
 PB Annual Reviews Inc.
 DT Journal; General Review
 LA English
 RE.CNT 103 THERE ARE 103 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 27 OF 31 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
 AN 1999:328165 BIOSIS
 DN PREV199900328165
 TI Pathogenesis of pertussis; a study using **knockout** mice and
mutant bacteria.
 AU Hellwig, S.M.M. (1); Schijns, V.E.C.; Kimman, T. G. (1); Mooi, F. R. (1)
 CS (1) RIVM, Bilthoven Netherlands
 SO Abstracts of the General Meeting of the American Society for Microbiology,
 (1999) Vol. 99, pp. 75.
 Meeting Info.: 99th General Meeting of the American Society for
 Microbiology Chicago, Illinois, USA May 30-June 3, 1999 American Society
 for Microbiology
 . ISSN: 1060-2011.
 DT Conference
 LA English

L10 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2002 ACS
 AB An attenuated bacterium in which the native fur gene, or homolog thereof,
 is modified such that the expression of the fur gene product, or homolog
 thereof, is regulated independently of the iron concn. in the environment
 of the bacterium, is suitable for use as a live vaccine. This has
 important implications in the manuf. of live vaccines since the increased
 expression of the protective antigens during the manuf. process will
 increase the efficacy of the live vaccine when administered to an animal
 or human subject. For alterations in the fur gene it is essential not to
 have a complete **knockout mutant** since this may be
 lethal. Thus, the fur gene may be placed under the control of another
 promoter which can be switched on or off independently of the factors
 (iron) which normally controls fur expression. Preferably, the bacterium
 is also attenuated by mutation of at least one gene essential for the
 prodn. of a metabolite or catabolite not produced by a human or animal;
 such mutations may be in an aro gene such as an aroB gene and/or aroL gene
 and/or a gene of the pur or pyr pathways. The bacterium may be, in
 particular, Neisseria meningitidis.

AN 1999:8105 CAPLUS
 DN 130:71518
 TI Live attenuated bacterial vaccines containing a modified iron uptake fur
 gene
 IN Baldwin, Thomas John; Borriello, Saverio Peter; Palmer, Helen Mary
 PA Medical Research Council, UK
 SO PCT Int. Appl., 49 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9856901	A2	19981217	WO 1998-GB1683	19980609
	WO 9856901	A3	19990318		

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,

DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
 KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
 NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
 UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
 CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9880268 A1 19981230 AU 1998-80268 19980609

AU 745003 B2 20020307

EP 996712 A2 20000503 EP 1998-928436 19980609

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, FI

BR 9809974 A 20010918 BR 1998-9974 19980609

JP 2002511752 T2 20020416 JP 1999-501891 19980609

PRAI GB 1997-11964 A 19970609

WO 1998-GB1683 W 19980609

L10 ANSWER 29 OF 31 MEDLINE

AB Pertussis toxin (PT) is a major virulence factor of **Bordetella pertussis** which exerts a range of effects on the immune system, including the enhancement of IgE, IgA and IgG production, delayed-type hypersensitivity reactions, and the induction of experimental autoimmune diseases. However, the mechanism by which PT mediates adjuvanticity remains to be defined. In this investigation we have shown that PT can potentiate antigen-specific T cell proliferation and the secretion of IFN-gamma, IL-2, IL-4 and IL-5 when injected with foreign antigens. A chemically detoxified PT and a genetic **mutant** with substitutions/deletions in the S-1 and B oligomer components that abrogate enzymatic and binding activity displayed no adjuvant properties. In contrast, a non-toxic S-1 **mutant** devoid of enzymatic activity but still capable of receptor binding retained its adjuvanticity, augmenting the activation of both Th1 and Th2 subpopulations of T cells. In an attempt to address the mechanism of T cell activation, we found that PT stimulated the production of IFN-gamma and IL-2 by naive T cells and IL-1 by macrophages. Therefore potentiation of distinct T cell subpopulations may have resulted in part from the positive influence of IFN-gamma on the development of Th1 cells and the co-stimulatory role of IL-1 for Th2 cells. Furthermore, PT augmented expression of the co-stimulatory molecules B7-1 and B7-2 on macrophages and B cells, and CD28 on T cells, suggesting that the adjuvant effect may also be associated with facilitation of the second signal required for maximal T cell activation. This study demonstrates that the immunopotentiating properties of PT are largely independent of ADP-ribosyltransferase activity, but are dependent on receptor binding activity and appear to involve enhanced activation of T cells.

AN 1998307520 MEDLINE

DN 98307520 PubMed ID: 9645613

TI Pertussis toxin potentiates Th1 and Th2 responses to co-injected antigen: adjuvant action is associated with enhanced regulatory cytokine production and expression of the co-stimulatory molecules B7-1, B7-2 and CD28.

AU Ryan M; McCarthy L; Rappuoli R; Mahon B P; Mills K H

CS Department of Biology, National University of Ireland, Maynooth, Co. Kildare.

SO INTERNATIONAL IMMUNOLOGY, (1998 May) 10 (5) 651-62.

Journal code: 8916182. ISSN: 0953-8178.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals; AIDS

EM 199809

ED Entered STN: 19980917

Last Updated on STN: 19980917

Entered Medline: 19980908

L10 ANSWER 30 OF 31 LIFESCI COPYRIGHT 2002 CSA

AB Cardiac muscarinic receptors activate an inwardly rectifying K super(+) channel, I sub(K+ Ach), via pertussis toxin (PT)-sensitive heterotrimeric G proteins (in heart G sub(i2), G sub(i3), or G sub(0)). We have used embryonic stem cell (ES cell)-derived cardiocytes with targeted inactivations of specific PT-sensitive alpha subunits to determine which G proteins are required for receptor-mediated regulation of I sub(K+ Ach) in intact cells. The muscarinic agonist carbachol increased I sub(K+ Ach) activity in ES cell-derived cardiocytes from wild-type cells, in cells lacking alpha sub(0), and in cells lacking the PT-insensitive G protein alpha sub(q). In cells with targeted inactivation of alpha sub(i2) or alpha sub(i3), channel activation by both carbachol and adenosine was blocked. Carbachol-induced channel activation was restored in the alpha sub(i2)- and alpha sub(i3)-null cells by reexpressing the previously targeted gene and guanosine 5'-[gamma -thio] triphosphate was able to fully activate I sub(K+ Ach) in excised membranes patches from these mutants. In contrast, negative chronotropic responses to both carbachol and adenosine were preserved in cells lacking alpha sub(i2) or alpha sub(i3). Our results show that expression of two specific PT-sensitive alpha subunits (alpha sub(i2) and alpha sub(i3) but not alpha sub(0)) is required for normal agonist-dependent activation of I sub(K+ Ach) and suggest that both alpha sub(i2)- and alpha sub(i3)-containing heterotrimeric G proteins may be involved in the signaling process. Also the generation of negative chronotropic responses to muscarinic or adenosine receptor agonists do not require activation of I sub(K+ Ach) or the expression of alpha sub(i2) or alpha sub(i3).

AN 97:108300 LIFESCI

TI Targeted inactivation of alpha sub(i2) or alpha sub(i3) disrupts activation of the cardiac muscarinic K super(+) channel, I sub(K+ Ach), in intact cells

AU Sowell, M.O.; Ye, Chianping; Ricupero, D.A.; Hansen, S.; Quinn, S.J.; Vassilev, P.M.; Mortensen, R.M.*

CS Endocrine-Hypertension Division, Department of Medicine, Brigham and Women's Hospital and Harvard Medical School, 221 Longwood Avenue, Boston, MA 02115, USA

SO PROC. NATL. ACAD. SCI. USA, (19970700) vol. 94, no. 15, pp. 7921-7926. ISSN: 0027-8424.

DT Journal

FS G

LA English

SL English

L10 ANSWER 31 OF 31 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 3

AB In *Bordetella pertussis*, the coordinate regulation of virulence factor expression is controlled by the products of the bvgAS locus. In the presence of modulating signals such as MgSO-4, nicotinic acid, or reduced temperature, the expression of bvg-activated genes is reduced while the expression of bvg-repressed genes is induced: One model for the regulation of bvg-repressed genes predicts the existence of a repressor protein encoded by a bvg-activated gene. Once activated, the product of this bvg-activated gene would bind to and repress transcription from the bvg-repressed genes. We isolated five genetically independent transposon insertion mutants of *B. pertussis* that have a phenotype consistent with the knockout of a putative bvg-regulated repressor. These mutants constitutively expressed a vrg6-phoA transcriptional fusion but demonstrate normal bvgAS function. Genomic mapping and DNA sequence analysis of the sites of transposon insertion demonstrated that these mutants define a locus downstream of bvgAS. Introduction of an in-frame, 12-bp insertion within this locus also conferred the mutant phenotype, confirming that the phenotype seen in the transposon mutants is the result of disruption of a distinct gene, which we have designated bvgR, and is not a consequence of polar effects on bvgAS.

AN 1995:313470 BIOSIS
DN PREV199598327770
TI Identification of a Locus Required for the Regulation of bvg-Repressed
Genes in **Bordetella pertussis**.
AU Merkel, Tod J. (1); Stibitz, Scott
CS (1) LME/NIDR/NIH, Building 30, Rm. 532, 9000 Rockville Pike, Bethesda, MD
20892 USA
SO Journal of Bacteriology, (1995) Vol. 177, No. 10, pp. 2727-2736.
ISSN: 0021-9193.
DT Article
LA English